

**REPORT ON
SELF-IMPLEMENTING CLEANUP AND DISPOSAL PLAN
FORMER ENERGY INTERNATIONAL, INC. PARCEL
CYPHER STREET
SOUTH BOSTON, MASSACHUSETTS**

by

**Haley & Aldrich, Inc.
Boston, Massachusetts**

for

**United States Environmental Protection Agency
Boston, Massachusetts**

**File No. 06318-530
October 2012**

Haley & Aldrich, Inc.
465 Medford St.
Suite 2200
Boston, MA 02129-1400

Tel: 617.886.7400
Fax: 617.886.7600
HaleyAldrich.com



31 October 2012
File No. 06318-530

United States Environmental Protection Agency
Region 1 Office (EPA New England)
5 Post Office Square, Suite 100 Mail Code: OSRR07-2
Boston, Massachusetts 02109

Attention: Ms. Kimberly Tisa
Region 1 TSCA PCB Coordinator

Subject: Self-Implementing Cleanup and Disposal Plan
Former Energy International, Inc. Parcel
Cypher Street
South Boston, Massachusetts
Release Tracking Number (RTN) 3-29395

Dear Ms. Tisa:

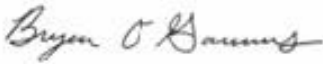
Haley & Aldrich, Inc. (Haley & Aldrich) is pleased to submit this Self-Implementing Cleanup and Disposal Plan ("SIP") for the above-referenced project site. This document has been prepared pursuant to 40 CFR 761.61 of the regulations under the Toxic Substances Control Act (TSCA) and is being submitted in accordance with the requirements at 40 CFR 761.61(a)(3) and 761.61(c) for notification and management of bulk PCB remediation waste. The subject property is also a Disposal Site pursuant to the Massachusetts Contingency Plan (MCP) 310 CMR 40.0000. The Massachusetts Department of Environmental Protection (MassDEP) has assigned Release Tracking Number (RTN) 3-29395 to the Disposal Site (hereinafter referred to as the "Site").

Haley & Aldrich prepared this Self-Implementing Plan on behalf of our clients, The McCourt-Broderick Limited Partnership c/o The McCourt Company, Inc. (the Owners) in preparation for remediating PCB-impacted soils at the subject site. The information presented herein should be considered the most up-to-date information as of the date it is submitted.

We have very much appreciated your guidance and assistance with this project to-date. Please do not hesitate to contact us should you have any questions or require additional information.

Sincerely yours,

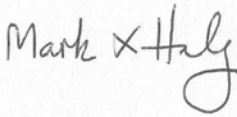
HALEY & ALDRICH, INC.



Bryan O. Gammons
Staff Scientist



Cole E. Worthy III
Vice President, LSP



Mark X. Haley
Senior Vice President

Enclosures

c: MassDEP: Attn: Bureau of Waste Site Cleanup
McCourt-Broderick Limited Partnership c/o The McCourt Company, Inc.: Attn: Austin
Regolino
Davis Malm & D'Agostine: Attn: William Griffin and Paul Feldman

G:\06318\530 - SIP\Report\2012_1023_HAI_Cypher St SIP_F.doc

TABLE OF CONTENTS

	Page
LIST OF TABLES	iii
LIST OF FIGURES	iii
1. INTRODUCTION	1
1.1 Purpose and Scope	1
1.2 Site Location and Conditions	1
1.3 Historical Site Usage	2
1.4 Previous PCB Remediation	3
1.5 Regulatory History and Status	3
1.5.1 RTN 3-0580	3
1.5.2 RTN 3-29395	4
1.6 Previous EPA Correspondence	4
1.7 Anticipated Future Property Use	5
1.8 Limitations	5
2. SITE CHARACTERIZATION	6
2.1 Subsurface Exploration Programs	6
2.1.1 Central Artery Project - Massachusetts Highway Department (Prior to 1992)	6
2.1.2 Haley & Aldrich, Inc. Soil Sampling (November and December 2010)	6
2.1.3 Haley & Aldrich, Inc. Groundwater Sampling (January 2011) – Phase 1	7
2.1.4 Supplemental Haley & Aldrich, Inc. Soil Sampling (2012) – Phase 2	8
2.2 Summary of Sampling and Testing Results	8
2.3 Geologic Site Characteristics	11
2.3.1 Subsurface Soil and Bedrock Conditions	11
2.3.2 Groundwater Conditions	11
3. APPLICABILITY AND NOTIFICATION UNDER 40 CFR 761	12
3.1 Nature of Contamination	12
3.2 TSCA Characterization Sampling Procedures	13
3.3 TSCA-Regulated Area	14
3.4 Location and Extent of Contamination	14
3.4.1 Soil	14
3.4.2 Groundwater	15
4. SELF-IMPLEMENTING CLEANUP AND DISPOSAL OF PCB REMEDIATION WASTE	17
4.1 Occupancy Areas and Associated Cleanup Levels	17
4.2 Remedial Approach	17
4.2.1 Site Logistics and Equipment Decontamination	18
4.2.2 Soil Excavation	19
4.2.3 Soil Management and Off-Site Disposition	20

TABLE OF CONTENTS, Continued

4.2.4	Equipment Decontamination and Dust Suppression	21
4.2.5	Decontamination and On-Site Reuse of Concrete and Nonporous Materials	21
4.3	Confirmatory Post-Excavation Soil Sampling	22
4.3.1	Bottom of Excavation Confirmatory Sampling	22
4.3.2	Sidewall Sampling	23
4.4	Backfilling	23
4.5	Water Management	24
4.5.1	Construction Dewatering Effluent	24
4.5.2	Decontamination Wastewater	24
4.6	Public Involvement	24
4.7	Schedule	24
4.8	Certification of Owner and Party Conducting Cleanup	24
5.	CLOSING	25

TABLES

FIGURES

APPENDIX A – Correspondence

APPENDIX B – Geoprobe Boring Logs *(Provided Electronically on CD)*

APPENDIX C – Groundwater Well Installation Reports

APPENDIX D – Laboratory Analytical Data Reports *(Provided Electronically on CD)*

LIST OF TABLES

Table No.	Title
I	Summary of Historical Soil Quality Data
II	Summary of Soil Quality Data
III	Summary of Groundwater Quality Data

LIST OF FIGURES

Figure No.	Title
1	Project Locus
2	Site and Subsurface Exploration Location Plan
3	Total PCB Concentrations in Soil
4	PCB Remediation Excavation Plan
5	Site Logistics Plan

1. INTRODUCTION

1.1 Purpose and Scope

The sampling and analysis plan described herein was developed with EPA guidance in accordance with 40 CFR 761.61(c) to support The McCourt-Broderick Limited Partnership c/o The McCourt Company, Inc. remedial goals. The results form the basis for identifying and characterizing the portion of the Site regulated under both the Massachusetts Department of Environmental Protection (MassDEP) Massachusetts Contingency Plan (MCP), 310 CMR 40.0000 and Toxic Substances Control Act (TSCA) and for determining appropriate cleanup and disposal activities to be conducted to achieve applicable TSCA remedial goals.

The portion of the property that is the subject of this Self-Implementing Plan consists of the area where PCBs have been detected in soils at concentrations greater than 1 mg/kg and thus are regulated under the TSCA. The limits of the area regulated under TSCA are shown on Figure 2 and Figure 5 and consist of approximately 4,775 sf. The TSCA-regulated area is a subset of the MCP site tracked under RTN 3-29395 and is therefore also subject to the requirements of the MCP.

Remedial activities and Site improvements will be coordinated with and conducted in accordance with the requirements of the MCP. The SIP and an MCP Release Abatement Measure (RAM) Plan will provide guidance for the management of soils and groundwater at the Site during redevelopment.

1.2 Site Location and Conditions

The Former Energy International, Inc. property is located in South Boston, Massachusetts, at the intersection of South Boston Bypass Road and Cypher Street (Figure 1). The subject property is also a Disposal Site pursuant to the MCP, 310 CMR 40.0000. MassDEP has assigned Release Tracking Number (RTN) 3-29395 to the Disposal Site (hereinafter referred to as the "Site"). Haley & Aldrich submitted an MCP Phase I Initial Site Investigation Report, Tier II Classification Submittal and Conceptual Phase II Scope of Work for the Site to MassDEP on 25 July 2011.

The Site consists of one parcel totaling approximately 18,000 ft of land and is referenced as City of Boston Tax Assessor Parcel Number 06-2771-100. The limits of the Site are indicated as shown on Figure 2. The Site is located in an urban area of South Boston and is generally covered by gravel, broken concrete, abandoned railroad tracks and other miscellaneous debris, and/or vegetation. No buildings currently exist on the Site, with the exception of a small signal cabinet structure associated with the inactive rail service. The Site is relatively level with elevations ranging from approximately El. 15 to El. 17 Boston City Base (BCB).

The Site is located in an urban setting in a mixed commercial, industrial area of South Boston. The Site is bounded by the South Boston Bypass Road to the northwest, Cypher Street to the northeast, B Street to the southeast, and a portion of West 1st Street to the southwest. Some portion of the Site is paved with the remainder unpaved. The Universal Transverse Mercator (UTM) Coordinates for the Site are UTM Northing: 4689905 and Easting: 330990 Zone 19.

1.3 Historical Site Usage

Based on a review of available aerial photographs, Sanborn Maps and previous reports prepared for the subject Site and surrounding properties, historically, the Site was utilized as a rail yard by the New York, New Haven, and Hartford Railroad (NHRR), prior to the purchase of the NHRR by Penn Central railroad. Review of Sanborn Maps dated from the period 1888 through 1988 indicates that the Site was occupied by numerous railroad tracks. In approximately 1980, Broderick Properties, Inc. (a subsidiary of The McCourt Company) entered into a Purchase and Sale Agreement to buy the subject Site from Penn Central Corp. FPC Properties, Inc. (a subsidiary of Cabot, Cabot & Forbes) subsequently purchased the subject site from Penn Central Corp. After some litigation, in June 1987, the subject site was awarded by the Court to Energy International, Inc. (a subsidiary of The McCourt Company).

The former Energy International, Inc. property (City of Boston Tax Assessor Parcel Number 06-2771-100) is one of multiple parcels located within the disposal site boundaries of the Boston Junk/SAK Recycling Corporation (also known as Former Boston Junk), 14 Louis Street, Boston, MA (RTN 3-0580). The Boston Junk/SAK disposal site, RTN 3-0580 was reported to MassDEP in the early 1980s due to a release of polychlorinated biphenyls (PCBs) from transformers formerly stored at this location. In 1992 a limited subsurface investigation program indicated that PCB contamination was present at the subject Site. Soil remediation was undertaken for the CSX easement that extends through the northeast corner and the east side of the Cypher Site, as well as for substantial portions of the properties located northeast of B Street and the Site by the Massachusetts Highway Department during the Central Artery (I-93/Tunnel(I-90)) project. In 1999 and 2000 the Boston Redevelopment Authority and Massachusetts Convention Center Authority (BRA/MCCA) acquired the Boston Junk/SAK Recycling properties (Parcels 0602772002, 0602773001, and 0602773002), including a portion of the Energy International properties (Parcel 0602771000), which is the subject Site. The (BRA/MCCA) acquired most of the properties associated with Boston Junk/SAK Recycling Corporation through eminent domain and subsequently initiated cleanup response actions on these properties to make the site suitable for unrestricted human use. Oil and hazardous material (OHM) contaminated soil was excavated and removed for off-site disposal.

Review of available reports and Sanborn Maps indicate that Boston Junk/SAK Recycling Corporation activities were primarily limited to the area east of New Cypher Street and it is not known how much activity associated with the Boston Junk/SAK Recycling Corporation occurred at the subject Disposal Site, RTN 3-29395. Sanborn Maps do not indicate any buildings to have existed on the subject Site.

Boston Junk/SAK records indicated that Boston Junk commonly purchased large numbers of electrical items including transformers, capacitors, wire, cable, and lead coated cable, from Boston Edison Company. Firefighting activities are believed to have also contributed to the PCB and associated total petroleum hydrocarbon (TPH) and metals migration across the Boston Junk/SAK disposal site.

The Boston Junk/SAK disposal site was the subject of litigation in the *Commonwealth of Massachusetts, Boston Redevelopment Authority and the Massachusetts Convention Center Authority, Plaintiffs v. Boston Edison Company, SAK Recycling Corporation, Fiore Construction, Co., Inc and Walter Fiore Defendants*, Mass Sup. Ct. Civ. Action No. 96-0673A. Haley & Aldrich previously reviewed the Final Judgment in Civil Action Number 96-0673A and 96-0628D (Final Judgment) dated 8 March 2006. It was concluded that the Final Judgment pertained to PCB impacted land at, and in the area of, the former Boston Junk/SAK Recycling operations, a portion which is now occupied by the Boston Convention & Exhibition Center (BCEC) and New Cypher Street.

1.4 Previous PCB Remediation

Limited subsurface testing indicated that PCB contamination was present at the subject Site, some of which was remediated prior to the 1992 construction of the adjacent South Boston Haul Road (currently South Boston Bypass Road). Soil remediation was performed under the Central Artery (I-93/Tunnel (I-90)) Project on behalf of the Massachusetts Highway Department in preparation of the South Boston Bypass Road. Remediation consisted of the excavation and replacement of approximately 5,200 tons (within and beyond the limits of the subject site) of PCB-impacted ($>2\text{mg/kg}$) surficial soils as documented in the Camp Dresser and McKee (CDM) report submitted to the Massachusetts Highway Department entitled: "Summary Documentation Report for the Close-Out of PCB Remediation Site, South Boston Haul Road, Central Artery/Tunnel Project, Volumes 1&2," dated February 1993.

Remedial goals were to allow PCB concentration levels less than 2 mg/kg in surficial soils. The CDM report further indicated that an isolated area, consisting of approximately 175 cubic yards (cy) of soil containing PCB concentrations exceeding the Upper Concentrations Limit (UCL), potentially remained at the Boston Haul Road Site (exact location not defined). The limits of the PCB remediation and limits of the subject Disposal Site are indicated as shown on Figure 2. Historical confirmatory PCB data provided by CDM at the Site and surrounding area is presented in Table I of this Report.

In the years of 1990 to 1992 MassHighway conducted MCP remedial response action assessment and cleanup of the right-of-way for the Haul Road/SBBR as part of the Central Artery/Third Harbor Tunnel project. This project included assessment, cleanup and achievement of a MCP permanent solution for the CSX easement that extends through the northeast corner and east side of the Cypher Site, as well as for substantial portions of the properties located northeast of B Street and the Site. The limits of the PCB remediation and limits of the subject Disposal Site are indicated as shown on Figure 2.

1.5 Regulatory History and Status

1.5.1 RTN 3-0580

Review of the MassDEP database listing for the Boston Junk/SAK disposal site indicates that the Boston Junk/SAK disposal site (RTN 3-0580) is classified as a Tier 1A site under the MCP, 310 CMR 40.0000 indicating that any remedial/intrusive work would require approval from the MassDEP. Review of the MassDEP database and reports prepared by others indicates that the Boston Junk/SAK disposal site is also regulated under the United States Environmental Protection Agency's (EPA's) Toxic Substance Control Act (TSCA).

The Boston Junk/SAK disposal site, RTN 3-0580 (was reported in the early 1980s due to a release of polychlorinated biphenyls (PCBs) from transformers formerly stored at the site. Boston Junk/SAC records indicated that Boston Junk commonly purchased large numbers of electrical items including transformers, capacitors, wire, cable, and lead coated cable, from Boston Edison Company. Firefighting activities are believed to have also contributed to the PCB and associated TPH and metals migration across the Boston Junk/SAK disposal site.

In 1998, Boston Edison Company completed an Immediate Response Action (IRA) within the former Boston Junk/SAK Recycling Corporation portion of Disposal Site RTN 3-0580 to address elevated levels of PCBs in soil in this area. The purposes of the IRA were to abate a potential imminent hazard condition on the former SAK property, and to assess the nature and extent of PCB contamination in soil on and adjacent to the property. Releases of PCBs likely occurred on the former SAK property during its operation as a junkyard. Further, active rail

yard activities including the accidental release of PCBs resulting from transportation of transformers on the property adjacent to the former SAK property have been reported.

1.5.2 RTN 3-29395

MassDEP issued a Notice of Responsibility (NOR) letter, dated 23 July 2010 to the Former Energy International, Inc. disposal site (“subject site”) and lists the McCourt-Broderick Limited Partnership (Mccourt) as the potentially responsible party (PRP) and owner of the former Energy International, Inc. property. This NOR letter assigned RTN 3-29395 to the Former Energy International, Inc. disposal site (“subject site”). The NOR stated that response actions are necessary at the subject site (RTN 3-29395) to achieve a Response Action Outcome (RAO) Statement, the endpoint in the MCP regulatory process. The July 2010 NOR letter also stated the assessment should characterize all contaminants of concern (COC) at the subject site, including PCBs, heavy metals, polynuclear aromatic hydrocarbons (PAHs), and petroleum hydrocarbons.

Haley & Aldrich completed a limited soil and groundwater sampling program during the period December 2010 to January 2011. The testing program included the analysis of twenty-seven soil samples for chemical analysis of one or more of the following parameters: volatile organic compounds (VOCs); semi-volatile organic compounds (SVOCs); extractable petroleum hydrocarbons (EPH); volatile petroleum hydrocarbons (VPH); metals; TCLP Lead; and waste characteristics. During this same time period, an additional fifty-four soil samples were analyzed for chemical analysis of PCBs. Compounds of concern detected in soil at the Site are VOCs, SVOCs (including polycyclic aromatic hydrocarbons (PAHs)), EPH, VPH, metals, and Aroclor 1254 and Aroclor 1260.

1.6 Previous EPA Correspondence

Based on Haley & Aldrich telephone discussions and a meeting with Kim Tisa, EPA Region 1 - PCB Coordinator, on 4 May 2011 and 8 December 2011, respectively, it was concluded that the Site would be subject to EPA TSCA regulations based on the following rationale: the Site and Site vicinity has a history of release(s) of PCBs; chemical results approaching PCB concentrations of 50 ppm in soil during the December 2010/January 2011 testing program (described below); the date of the fire and documented PCB release at the Site occurred after 1978; and the original source of PCBs at the Site were potentially present at concentrations greater than 50 ppm. Accordingly, a Self-Implementing PCB Clean-up and Disposal Plan (SIP) pursuant to TSCA requirements at 40 CFR 761.61(a)(3) and 761.3 is being submitted herein to allow for the clean-up and off-site disposal of TSCA-regulated soil at the Site.

Based on the 8 December meeting with Kim Tisa, it was recommended that additional sampling and testing for PCBs be conducted at areas of the Site which detected PCBs at levels exceeding 1 mg/kg since the Site is subject to TSCA regulations. Specifically, additional data was required at depths of 0 to 0.5 ft, 1 to 2 ft and 2 to 3 ft below ground surface to evaluate PCB impact in near surface soils. As a result, a subsequent subsurface exploration and chemical testing program was completed at the Site during March 2012. As discussed in the SIP, herein, the data collected at the Site to date confirms the results of the previous remediation work and remedial goal of 2 ppm (remedial goal previously adopted for the South Boston Haul Road Central Artery/Tunnel project). Historical confirmatory soil data developed from the 1992 MassHighway cleanup program are presented on Figure 3 and in Table I. Based on review of the 1992 confirmatory test results and test results obtained during our December 2010 to January 2011 testing program PCB concentrations were detected at levels below 1 ppm in the

previously remediated area, with one exception. At test boring HA104, PCBs were detected at a concentration of 1.84 ppm in soil collected at a depth of 0-2 ft below existing ground surface.

1.7 Anticipated Future Property Use

The Site is currently unoccupied. Future property use has not been determined at this time but will likely remain as commercial or industrial use.

1.8 Limitations

This SIP was prepared by Haley & Aldrich in accordance with our Memorandum to McCourt-Broderick Limited Partnership c/o The McCourt Company, Inc. (Mccourt) dated 15 June 2012 (Proposal). The SIP was prepared for the exclusive use of McCourt, the MassDEP and the EPA in connection with the subject Former Energy International Inc. project. There are no intended beneficiaries other than McCourt, the MassDEP and the EPA.

Haley & Aldrich shall owe no duty whatsoever to any other person or entity on account of the Proposal or the SIP. Use of this SIP by any person or entity other than McCourt, the MassDEP and the EPA for any purpose whatsoever without the express written authorization of McCourt and Haley & Aldrich shall be at such other person's or entity's sole risk, and shall be without legal exposure or liability to McCourt or Haley & Aldrich, Inc.

2. SITE CHARACTERIZATION

2.1 Subsurface Exploration Programs

Several subsurface explorations have been conducted at the Site by Haley & Aldrich and others to characterize the nature and extent of contamination and to classify the soils for potential off-site disposition. Details regarding the subsurface exploration programs are provided below. The locations of the test borings and observation wells pertinent to the TSCA regulated areas are shown on Figure 2 and Figure 3.

2.1.1 Central Artery Project - Massachusetts Highway Department (Prior to 1992)

Limited subsurface testing indicated that PCB contamination was present at the Site, the majority of which was remediated prior to the 1992 construction of the adjacent South Boston Haul Road (currently South Boston Bypass Road). Soil remediation was performed under the Central Artery (I-93/Tunnel (I-90)) Project on behalf of the Massachusetts Highway Department in preparation of the South Boston Bypass Road. Remediation consisted of the excavation and replacement of approximately 5,200 tons (within and beyond the limits of the subject site) of PCB-impacted ($>2\text{mg/kg}$) surficial soils as documented in the Camp Dresser and McKee (CDM) report entitled: "Summary Documentation Report for the Close-Out of PCB Remediation Site, South Boston Haul Road, Central Artery/Tunnel Project, Volumes 1&2," dated February 1993. The CDM report further indicated that an isolated area, consisting of approximately 175 cubic yards (cy) of PCB-impacted soil, potentially remained at the Boston Haul Road Site (Note: exact location not defined) (See Figure 3 for limits of the previous CDM excavation activities).

Historical soil quality data collected from the Site and vicinity is presented in Table I. According to the above referenced CDM Report, the soil samples presented in Table I are representative of post excavation confirmatory soil quality data remaining at the remediation limits.

2.1.2 Haley & Aldrich, Inc. Soil Sampling (November and December 2010)

As previously discussed, the MassDEP July 2010 NOR letter assigned RTN 3-29395 to the Former Energy International, Inc. disposal site ("Site") and lists the McCourt-Broderick Limited Partnership (McCourt) as the potentially responsible party (PRP) and owner of the former Energy International, Inc. property. The NOR requested that additional response actions are necessary and should characterize all contaminants of concern (COC) at the subject site. As a result, the following response actions described below were completed at the Site as part of MCP activities.

Soil samples were obtained from thirteen (13) Geoprobe borings conducted during the period 29 November 2010 to 2 December 2010 by Geologic-Earth Exploration, Inc. at the approximate locations shown on Figure 2. Borings were advanced via a Geoprobe to depths ranging from 16 to 20 ft with generally continuous soil sampling through the fill material. Observation wells were installed in three of the borehole locations to obtain information on the groundwater quality beneath the Site. Geoprobe boring reports are provided in Appendix B. Groundwater Observation Well Installation reports are provided in Appendix C.

The Geoprobe borings encountered fill overlying naturally deposited organic and marine deposits. Fill material is generally described as poorly graded sand with gravel, sandy silt, cinders, ash, brick-fragments, clinkers and coal fragments. The thickness of the fill ranged from 12.2 to 19.5 ft. Depth to groundwater in the monitoring wells during January 2011 ranged from approximately 10 to 14 ft below ground surface.

From the period of 29 November 2010 to 2 December 2010, Haley & Aldrich prepared and submitted twenty-seven soil samples to Accutest Laboratories for chemical analysis of one or more of the following parameters: volatile organic compounds (VOCs); semi-volatile organic compounds (SVOCs); extractable petroleum hydrocarbons (EPH); volatile petroleum hydrocarbons (VPH); 8 RCRA metals; TCLP lead; and waste characteristics. During this same time period, an additional fifty-four soil samples were submitted to Accutest Laboratories for chemical analysis of PCBs.

A minimum of three composite soil samples were collected from each of the Geoprobe borings for PCB analysis. Composite soil samples were collected at depths of 0 to 2 ft below ground surface to evaluate near surface impacts and at depths of 2 to 4 ft and 6 to 8 ft below ground surface to evaluate the vertical extent of PCB impact. Additionally, five composite soil samples were collected from test borings HA111, HA112, and HA113 at depths ranging from 8 to 18 ft below ground surface. Additional soil sampling for PCBs was conducted at test borings HA111, HA112 and HA113 at the easternmost portion of the property.

One composite soil sample was collected from each of the Geoprobe borings at a depth of 0 to 4 ft to evaluate near surface soil impacts for VOCs, PAHs, metals, and petroleum hydrocarbons. An additional one to two soil samples were also collected from each of the Geoprobe borings at depths ranging from 4 to 13 ft and from 12 to 18 ft to characterize the vertical extent of impact. Three composite soil samples (HA111 (16 to 18 ft), HA112, (16.5 to 18 ft) and HA113 (15.5 to 18 ft)) were collected from the natural organic deposits to evaluate the potential vertical impact of PCBs at the site.

Results are summarized in Table II and laboratory analytical reports are provided electronically (CD) in Appendix D.

2.1.3 Haley & Aldrich, Inc. Groundwater Sampling (January 2011) – Phase 1

Haley & Aldrich collected one groundwater sample from monitoring well HA103 (OW) on 6 January 2011. Prior to the collection of the groundwater sample, the monitoring well was developed and the depth to groundwater was measured using a water level indicator. An attempt was made to collect additional groundwater samples from monitoring wells HA106 (OW) and HA111 (OW) on 6 January 2011; however, no water samples could be collected due to the slow recharge of water into these wells and the limited volume of standing water in the well. As a result, no water samples were collected from monitoring wells HA106 (OW) and HA111 (OW). Groundwater samples were collected from monitoring HA103 (OW) well using EPA low flow techniques. Groundwater samples were submitted to Alpha Analytical for analysis for the following: VOCs; EPH; 8 RCRA metals; and PCBs.

Depth to groundwater at the subject site ranged from 10.14 ft (El 4.18) below ground surface at HA111 (OW) to 13.7 ft (El 0.4) below ground surface at well HA103 (OW) during January

2011. Elevations are in feet and are referenced to Boston City Base (BCB). Depth to groundwater measurements and corresponding groundwater elevation data are presented in Table III. Based on the 6 January 2011 groundwater and corresponding elevation data, groundwater at the property flows to the west.

2.1.4 Supplemental Haley & Aldrich, Inc. Soil Sampling (2012) – Phase 2

The objective of the supplemental subsurface exploration and chemical testing program was to further delineate the nature and extent of PCB-impacted soil in the western and eastern areas of the Site which detected PCBs at levels exceeding 1 mg/kg in the non-remediated and previously remediated areas of the property. These areas are also located outside of the previously PCB remediated area as discussed in previous section of this report. Specifically, additional sampling and assessment of PCBs was conducted in the areas of previously completed Geoprobe borings HA103, HA104, HA111, HA112 and HA113 to help identify the volume of soil requiring off-site disposition in order to achieve a Permanent Solution at the Site for unrestricted site use without an Activity and Use Limitation (AUL) and to maintain compliance with EPA TSCA regulations under 40 CFR Part 761.

Soil samples were obtained from eight (8) Geoprobe borings conducted on 2 March 2012 by New Hampshire Boring, Inc. at the approximate locations shown on Figure 2. Borings were advanced via a Geoprobe to a depth of 8 ft with generally continuous soil sampling in the fill material. Geoprobe test boring reports are provided in Appendix B. The Geoprobe borings encountered fill materials generally described as poorly graded sand with gravel, sandy silt, cinders, ash, brick-fragments, clinkers, concrete, wood, and coal fragments.

Three composite soil samples were collected from each of the Geoprobe borings for PCB analysis. Composite soil samples were collected at depths of 0 to 0.5 ft below ground surface to evaluate near surface impacts and at depths of 1 to 2 ft and 2 to 3 ft below ground surface to evaluate the vertical extent of PCB impact. Results are summarized in Table II and laboratory analytical reports are provided electronically (CD) in Appendix D.

2.2 Summary of Sampling and Testing Results

Soil and groundwater analytical testing results obtained by Haley & Aldrich are summarized on Tables II and Table III, respectively. Analytical laboratory reports are provided in Appendix D (CD). In summary, results indicated the following:

Phase 1 Soil Results

- A total of 15 out of the 27 soil samples submitted for analysis indicated PAHs levels greater than applicable RCS-1 thresholds. It is believed that the PAHs detected in the soil samples are attributable to the presence of ash, cinders and coal fragments observed in fill materials. In accordance with 310 CMR 40.0317(9), releases of oil or hazardous materials related to coal, coal ash, or wood ash may be considered exempt and do not require notification to MassDEP.
- Two of the 27 soil samples indicated EPH and/or VPH compounds greater than RCS-1 thresholds. At HA102 (0 to 4 ft), C9 to C10 aromatics were detected at a level of 194 mg/kg which exceeds the RCS-1 threshold of 100 mg/kg. At HA109 (0 to 4 ft), C11 to

C22 aromatics were detected at a level of 113 mg/kg, which slightly exceed the RCS-1 of 100 mg/kg.

- A total of 5 out of the 27 soil samples indicated concentrations of one or more of the following metals (antimony, arsenic, cadmium, chromium, lead and nickel) greater than RCS-1 thresholds.
- Only 2 out of the 54 soil samples submitted for chemical analysis indicated PCB concentrations greater than applicable RCS-1 thresholds (2 mg/kg). A total of 3 out of the 54 soil samples detected levels of PCBs greater than 1 mg/kg. These RCS-1 exceedances were detected in the near surface soil samples. At HA111 (0 to 2 ft), PCB Aroclor 1254 and Aroclor 1260 were detected at levels of 4.5 and 6 mg/kg respectively. At HA113 (0-2 ft) PCB Aroclor 1254 and Aroclor 1260 were detected at levels of 3.3 and 13 mg/kg respectively. No PCBs were detected above the MCP Upper Concentration Limit (UCL) for PCBs which is 100 mg/kg. In addition, no PCBs were detected in three composite soil samples collected from the organic deposits present beneath the fill materials at the site.

Phase 2 Soil Test Results

- At the western portion of the Site, identified as Area of Concern (AOC) West, no PCBs were detected above 1 mg/kg in Geoprobe borings HA201 through HA203 at depths of 0 to 0.5 ft, 1-2 ft, and 2-3 ft. As a result, Geoprobe borings HA201 and HA203 define the south and north extent of the PCB-impacted area (PCB concentration < 1 mg/kg), respectively. Geoprobe boring HA202, located between previously completed Geoprobe borings HA103 and HA104 also detected PCB concentration levels less than 1 mg/kg.
- At the eastern portion of the Site, identified as Area of Concern (AOC) East, at Geoprobe boring locations HA205 and HA208, PCBs were detected in the upper sample depth (0 to 0.5 ft) at concentration levels of 16.6 and 38.5 mg/kg, respectively. Geoprobe boring HA204 defines the southern extent of the PCB-impacted area (PCB concentration < 1 mg/kg). The western extent of AOC West is defined by borings HA109, HR-18, HA110, and HR-16, indicated as shown on Figure 3.

The presence of PCBs present at the Site is likely associated with the historic use of the property as a junkyard, in particular the presence of Boston Edison Company electrical equipment, and/or railroad and transit operations. Firefighting activities are believed to have also contributed to the PCB and associated TPH and metals migration across the Subject Disposal Site. PCB are common to a wide variety of every-day industrial uses and manufactured products – e.g. inks, dyes, carbon-less carbon paper, tar paper, coatings, paints, plastics, adhesives, lubricants, floor tile, cinder blocks, roofing tar, insulation, and electrical equipment. PCB Aroclors 1254 and 1260 which were detected at the subject Site are typical aroclors associated with dielectric fluid used in transformers. PCB also appears to be associated with fill materials. For example, the PCB concentrations and depth profile in Geoprobe borings HA103 and HA105 are not indicative of surface deposition; PCBs were not detected in the surficial soil samples collected at 0 to 2 ft, but were detected at deeper sample depths of 2 to 4 ft as indicated in Table II. Review of the MassDEP database indicates that multiple

aroclors including 1016, 1242, 1248, 1254 and 1260 have been detected on surrounding properties near the subject Disposal Site.

Groundwater Results

No RCGW-2 exceedances were detected in any of the groundwater samples and as a result, groundwater is not considered to be part of the Disposal Site, RTN 3- 29395 under the MCP as indicated in Table III. The laboratory data reports are included in Appendix D.

2.3 Geologic Site Characteristics

2.3.1 Subsurface Soil and Bedrock Conditions

This section summarizes subsurface soil and bedrock conditions encountered at the Site during the exploration programs as indicated above. Soil stratigraphy is described as follows, in order of general occurrence from existing grades downward.

- Miscellaneous Fill
- Organics
- Estuarine
- Marine Clay
- Glacial Till
- Bedrock

This area was created by various stages of filling conducted between the mid-to-late 1880s through 1900. Material used to fill the Disposal Site consists of granular fill, miscellaneous urban fill, organic fill, and cohesive fill. This combined unit varies in thickness across the Disposal Site from approximately 10 to 15 ft. In general, miscellaneous urban and granular fills overlie organic and cohesive fills. While the miscellaneous urban and granular fills were likely placed in graded lifts, the organic and cohesive fills appear to have been placed hydraulically, and are highly chaotic in their stratigraphic nature. Obstructions encountered in fill material consist of cobbles, boulders, railroad rails, ties, and ballast, construction debris, utilities and/or granite blocks. Units encountered beneath the fill include, from upper to lowermost, organic, estuarine, marine clay, glaciomarine, glaciofluvial, glaciolacustrine, till, and bedrock units.

2.3.2 Groundwater Conditions

Based on field measurements conducted in 2010 and 2011, groundwater was commonly encountered at a depth of 10.4 ft (El.4.18) bgs to 13.7 ft (El.0.4) bgs. No Reportable Concentration RCGW-2 exceedances were detected in any of the groundwater samples and as a result, groundwater is not considered to be impacted.

3. APPLICABILITY AND NOTIFICATION UNDER 40 CFR 761

Based on the concentrations of PCBs detected in soil and as explained below, the Site is being addressed based on the conclusion that it is subject to regulation under 40 CFR 761.

The PCB-contaminated soil at the Site is classified as *PCB remediation waste*. According to 40 CFR 761.3, *PCB remediation waste* means waste containing PCBs as a result of a spill, release, or other unauthorized disposal, at the following concentrations:

- materials disposed of prior to April 18, 1978, that are currently at concentrations ≥ 50 ppm [parts per million] PCBs, regardless of the concentration of the original spill;
- materials which are currently at any volume or concentration where the original source was ≥ 500 ppm PCBs beginning on April 18, 1978, or ≥ 50 ppm PCBs beginning on July 2, 1979; and
- materials which are currently at *any* concentration if the PCBs are spilled or released from a source not authorized for use under this part [emphasis added].

PCB remediation waste means soil, rags, and other debris generated as a result of any PCB spill cleanup, including, but not limited to: (1) environmental media containing PCBs, such as soil and gravel; dredged materials, such as sediments, settled sediment fines, and aqueous decantate from sediment.

Based on previous communications between EPA, the Site is being addressed based on the conclusion that it is subject to regulation under 40 CFR 761.

This document serves as the “notification” required by 40 CFR 761.61(a)(3). The nature and extent of contamination and sampling procedures are summarized below.

3.1 Nature of Contamination

Based on the to-date information from various file reviews and site characterization data, PCBs and other chemical constituents (PAHs, petroleum hydrocarbons, metals and, to a lesser extent, VOCs) detected in soil appear to have originated from miscellaneous filling at the Site and former use as a rail yard. Potential sources of PCBs detected in soil at the Site may also be attributable to former use of the Site by Boston Junk/SAC. Records indicated that Boston Junk commonly purchased large numbers of electrical items including transformers, capacitors, wire, cable, and lead coated cable, from Boston Edison Company. Firefighting activities are believed to have also contributed to the PCB and associated TPH and metals migration across the Boston Junk/SAC disposal site.

Review of available reports and Sanborn Maps indicate that Boston Junk/SAC Recycling Corporation activities were primarily limited to the area east of New Cypher Street and it is not known how much activity associated with the Boston Junk/SAC Recycling Corporation occurred at the subject Disposal Site, RTN 3-29395. Sanborn Maps do not indicate any buildings to have existed on the subject Site. Historically, the Site was utilized as a rail yard by the New York, New Haven, and Hartford Railroad (NHRR), prior to the purchase of the NHRR by Penn Central railroad. Review of Sanborn Maps dated from the period 1888 through 1988 indicates that the Site was occupied by numerous railroad tracks.

The horizontal limits of the Site are defined as shown on Figure 2, while the vertical limits extend from ground surface to approximately 2 ft below ground surface (bgs) at the eastern portion of the Site and at a depth of 4 ft bgs at the western portion of the Site. Figure 3 illustrates the distribution of total PCB concentrations detected in each soil sample obtained within the TSCA characterization area.

No RCGW-2 exceedances were detected in any of the groundwater samples and as a result, groundwater is not considered to be impacted or part of the Disposal Site, RTN 3-29395.

3.2 TSCA Characterization Sampling Procedures

As discussed in Sections 2.1 and 2.2 above, during December 2010 and January 2011, a comprehensive TSCA soil characterization program was conducted within the portion of the Site found to have been impacted by PCBs based on previous subsurface investigations conducted by Haley & Aldrich and other (herein referred to as “the TSCA characterization area”). The comprehensive TSCA soil characterization program was designed with modifications to the TSCA Self-Implementing prescribed sampling frequency, as allowed by 40 CFR 761.61(a), in consideration of the previously documented PCB soil remediation program undertaken by CDM in 1992 as part of the Central Artery (I-93/Tunnel (I-90)) Project on behalf of the Massachusetts Highway Department in preparation of the South Boston Bypass Road, as described in Section 1.4 and the distribution of PCBs detections mainly in the upper 2 ft of soil.

The TSCA characterization was initially developed based on historical data obtained at the Site. Based on our review of the existing data and the Site status, the following rationale for the PCB characterization program was undertaken to evaluate whether further characterization under TSCA was required:

- During December 2010 and January 2011, PCB data was collected on a 40 x 40 ft grid across the entire Site to evaluate PCB concentrations and the presence of other contaminants under the MCP. Composite soil samples were submitted for PCB analysis at depths of 0-2 ft, 2-4 ft, and 6-8 ft below ground surface. Additional soil sampling for PCBs was conducted at test borings HA111, HA112 and HA113 at the easternmost portion of the property at the AOC West area.
- Correspondence and a meeting with Ms. Kim Tisa of the EPA was conducted during 4 May 2011 and 8 December 2011 to discuss conducting additional sampling and testing for PCBs at areas of the Site which detected PCBs at levels exceeding 1 mg/kg. It was determined that a typical 15x15 ft grid PCB sampling program would not be required based on results of the previous testing programs and confirmatory PCB sampling conducted subsequent to the PCB remediation program conducted in 1992. Accordingly, additional data was collected from eight additional borings completed within 15 ft of the previous test borings which indicated PCB concentrations greater than 1 mg/kg. PCB samples were collected at depths of 0 to 0.5 ft, 1 to 2 ft and 2 to 3 ft below ground surface to evaluate PCB impact in near surface soils. We concluded that the data collected at the Site to date confirms the results of the previous remediation work and remedial goal of 2 ppm (remedial goal previously adopted for the South Boston Haul Road Central Artery/Tunnel project). Historical confirmatory soil data developed from the 1992 MassHighway cleanup program are presented on Figure 3 and in Table I.
- Soil samples were collected at 2 ft intervals at depths greater than 8 ft if any of the upper soil samples collected from the Geoprobe borings detected any PCB concentration levels greater than the laboratory detection limit.

- The TSCA soil characterization program was conducted to fill in data gaps from previous site investigations. The investigations were based on our review of the existing data, and assumptions that additional data would indicate that the concentrations and distribution of PCBs are generally consistent with what was previously documented.

3.3 TSCA-Regulated Area

Based on the historical data and the results of the recent TSCA characterization program, the TSCA-regulated area generally consists of an approximately 4,775 sq ft area in the eastern and western corners of the site:

- AOC-EAST: approximately 3,100 sq ft; extending up to 2 ft in depth (greater than 1 mg/kg PCBs), no levels exceeded 46.8 mg/kg;
- AOC-WEST-A: approximately 1,300 sq ft; extending up to 2 ft in depth (greater than 1 mg/kg PCBs), no levels exceeded 1.84 mg/kg; and
- AOC-WEST-B: approximately 375 sq ft; extending up to 4 ft in depth (greater than 1 mg/kg PCBs), no levels exceeded 1.28 mg/kg.

The limits of the TSCA-regulated area are shown on Figure 4.

3.4 Location and Extent of Contamination

3.4.1 Soil

During the Haley & Aldrich iterations of sampling, a total of 77 soil samples collected from the subject site have been submitted for chemical analysis for PCBs. The results of the laboratory data indicate that PCBs were not detected above laboratory detection limits ranging from approximately 0.04 to of 0.16 mg/kg. Additionally, of the detected PCB levels, PCBs were detected at concentrations less than 1 mg/kg in 28% of the samples. Overall, PCBs were either not detected or were detected at less than 1 mg/kg in approximately 87% of the 79 total samples collected. The chart below shows the breakdown of PCB concentrations detected in soil samples collected during the Haley & Aldrich investigations:

Total Samples:	79
Total Non-Detect:	47
Total Detect, ≤ 1 :	22
Total Detect, > 1 & ≤ 10 :	7
Total Detect, > 10 & ≤ 50 :	4
Total Detect, > 50 & ≤ 100 :	0
Total Detect, > 100 :	0

The chart below shows the breakdown of PCB concentrations historically detected in confirmatory soil samples collected at the Site and in the immediate Site vicinity during the Central Artery (I-93/Tunnel (I-90)) Project on behalf of the Massachusetts Highway Department.

Total Samples:	15
Total Non-Detect:	9
Total Detect, ≤ 1 :	4
Total Detect, > 1 & ≤ 10 :	2*
Total Detect, > 10 & ≤ 50 :	0
Total Detect, > 50 & ≤ 100 :	0
Total Detect, > 100 :	0

*Note that the two confirmatory soil samples collected by CDM, designated as HR-5 and HR-9 detected PCB concentrations greater than 1 mg/kg are located outside of the Site on an adjacent property

Figures 3 illustrate the distribution of PCBs both laterally and vertically at the Site.

Historical and recent PCB testing indicates the following:

- PCB contamination is primarily concentrated in the shallow fill material in the eastern corner of the subject site, adjacent to an apparent scrap yard (AOC-EAST). Where detected, PCBs are generally limited to the upper 2 ft of soil with detections ranging from 0.18 mg/kg (HA204) to 46.8 mg/kg (HA113).
- Minor concentrations of PCB contamination in the shallow fill material exist in the western corner of the subject site (AOC-WEST). Where detected, PCBs are generally limited to the upper 4 ft of soil with detections ranging from 0.22 mg/kg (HA201) to 1.84 mg/kg (HA104).
- Where detected, PCBs are generally limited to the top 4 ft, or less of soil. PCBs were not detected above 1 mg/kg at depths greater than 4 ft bgs.
- Outside the TSCA-regulated area within the soil remediation area within the property limits, PCBs were not detected above detection limits or were detected at concentrations less than 1 mg/kg.

A summary of historical and recent PCB data is provided in Table I and Table II, respectively. Copies of the laboratory data reports are included in Appendix D.

3.4.2 Groundwater

As discussed in Section 2.1.3 above, one groundwater sample was collected in January 2011 from observation well HA103 (OW) installed at the Site in 2010 and submitted for laboratory analysis for VOCs, EPH, dissolved metals and PCBs. Groundwater analytical data indicated that all VOCs, EPH, dissolved metals compounds were below applicable MassDEP Reportable Concentrations RCGW-2 criteria. Additionally, all PCBs were below applicable detection limits. The location of the observation well HA103 (OW) is shown on Figure 2. A summary of

groundwater quality data is provided in Table III, and copies of the laboratory data reports are included in Appendix D.

4. SELF-IMPLEMENTING CLEANUP AND DISPOSAL OF PCB REMEDIATION WASTE

This section presents a cleanup plan for the TSCA-regulated area. In summary, the cleanup plan involves both excavation and off-site removal of PCB-contaminated soils to achieve the cleanup levels described herein.

4.1 Occupancy Areas and Associated Cleanup Levels

The cleanup levels have been determined based on the likely future commercial use of the Site and the bulk PCB remediation waste High and Low Occupancy Area cleanup levels established in 40 CFR 761(a)(4)(i).

A *High Occupancy Area* is defined by 40 CFR 761.61 as follows:

“any area where PCB remediation waste has been disposed of on-site and where occupancy for any individual not wearing dermal and respiratory protection for a calendar year is: 840 hours or more (an average of 16.8 hours or more per week) for non-porous surfaces and 335 hours or more (an average of 6.7 hours or more per week) for bulk PCB remediation waste.”

High Occupancy Cleanup Levels for bulk PCB remediation waste are as follows:

- ≤ 1 ppm “without further conditions” (see 40 CFR 761.61(a)).
- > 1 ppm and ≤ 10 ppm if covered with a cap meeting the requirements of 40 CFR 761.61(a)(7) and a deed restriction is implemented as per 40 CFR 761.61(a)(8).

Low Occupancy Cleanup Levels for bulk PCB remediation waste are as follows:

- ≤ 25 mg/kg with an institutional control (see 40 CFR 761.61(a)(8)).
- > 25 mg/kg and ≤ 50 mg/kg if secured by a fence, marked with a sign that indicates that the PCB M_L mark, and an institutional control (deed restriction) is implemented as per 40 CFR 761.61(a)(8).
- > 25 mg/kg and ≤ 100 mg/kg if covered with a cap meeting the requirements of 40 CFR 761.61(a)(7) and a deed restriction is implemented as per 40 CFR 761.61(a)(8).

4.2 Remedial Approach

As discussed above, the remedial approach for the Site involves excavation and off-site removal of PCB contaminated soils to High Occupancy Levels without further conditions. Although no future redevelopment plans exist for the property, it is planned to remove PCB-impacted soils and other MCP-related constituents at the Site in order to achieve a Permanent Solution (MCP) and achieve a High Occupancy Cleanup Level (TSCA). Additional information is provided below.

- AOC-WEST A – All impacted soils above 1 mg/kg PCBs will be removed to a maximum depth of 2 ft below grade surface from this AOC which is located on the western portion of the parcel

which is located within a portion of the previously PCB soil removal and remediation work area performed in 1992 and the railroad tracks and the property boundary so that a TSCA cap does not have to be installed. This AOC would be considered High Occupancy without further conditions. It is not possible to remove the railroad tracks to conduct additional soil removal to the north along South Boston ByPass Road.

- AOC-WEST B – All impacted soils above 1 mg/kg PCBs will be removed to a maximum depth of 4.5 ft below grade surface from this AOC which is located on the western portion of the parcel between a portion of the previously PCB soil removal and remediation work area performed in 1992 and the railroad tracks and the property boundary area so that a TSCA cap does not have to be installed. This AOC would be considered High Occupancy without further conditions. It is not possible to remove the railroad tracks to conduct additional soil removal to the north along South Boston ByPass Road.
- AOC-EAST – All impacted soils above 1 mg/kg PCBs will be removed to a maximum depth of 2 ft below grade surface from this AOC which is located on the eastern portion of the parcel between the area the previously PCB soil removal and remediation work area performed in 1992 and the property boundary so that a so that a TSCA cap does not have to be installed. This AOC would be considered High Occupancy without further conditions.

As discussed above and in previous sections of this Report, the remedial approach involves the excavation and off-site disposal of PCB-impacted soils to a cleanup level of 1 mg/kg or less to allow for High Occupancy Use without further conditions, or an Activity and Use Limitation (AUL) under the MCP. Subsequent to removal of PCB-impacted soils, the excavated areas will be backfilled with “clean borrow material.”

4.2.1 Site Logistics and Equipment Decontamination

Prior to the start of excavation work, the Contractor will restrict access to the TSCA regulated areas by establishing and maintaining an Exclusion Zone, a Contamination Reduction Zone (area where truck washing and decontamination stations will be constructed and utilized), and a Support Zone as follows:

- Remedial activities within the Exclusion and Contamination Reduction Zones will be undertaken by 40-hour OSHA HAZWOPER trained contractors. The contractor will prepare and comply with a site-specific health and safety plan (HASP). The HASP will contain health and safety policies and procedures to complete the work described in this Self-Implementing Plan and comply with OSHA, NIOSH, local, state, and federal requirements.
- The Exclusion Zone will encompass the TSCA regulated areas, and personnel entering the Exclusion and Contamination Reduction Zones will have proper training certification and personal protective equipment, as required by the Contractor’s HASP.
- It is anticipated that flexible panel fencing will be erected to visibly identify the work zone perimeters. The panel fencing shall be removed upon completion of remedial activities within the TSCA regulated areas. Management and decontamination/disposal of fencing will vary depending upon whether the fencing was in contact with PCB

contaminated soils. Fencing in contact with PCB-contaminated soils will be managed in accordance with 40 CFR 761.

- Movement of personnel and equipment on to the Site and between the zones will be strictly regulated through access control points. Trucks and other vehicles entering the TSCA regulated areas will be routed through service entrance and exit areas, as shown on Figure 5.
- The Contractor will install a wheel wash at each location in the Contamination Reduction Zone where construction vehicles access and depart. Each truck leaving the Site will have its wheels washed and cleaned of debris at the decontamination stations located in the Contamination Reduction Zone. Decontamination of trucks leaving the TSCA regulated areas shall be conducted in accordance with TSCA 40 CFR 761.79.
- Trucks hauling soils to off-Site receiving facilities will be loaded in the Exclusion Zone. Loaded trucks will be covered with tight fitting covers, which will be securely fastened prior to leaving the Site. Additionally, each load leaving the Site will require documentation including copies of waste manifests, bills of lading, and vehicle license-plate number.
- Figure 5 (Site Logistics Plan) depicts the locations of the zones and the access and egress routes.

4.2.2 Soil Excavation

The treatment, excavation, and management of soil and groundwater will be conducted in accordance with the MCP and the requirements of TSCA. Haley & Aldrich will observe and document the work on a full-time basis, and will provide the Contractor with guidance relative to the requirements outlined in this Self-Implementing Plan.

4.2.2.1 Excavation Support

Depending on the conditions encountered, the excavation support system for the proposed remediation along the property line is anticipated to consist of steel plates or a trench box. The excavation and removal of the majority of historic fill within the sheeting limits will be required to support the proposed remediation.

4.2.2.2 Sequence of Excavation and Related Activities

The contractor will excavate soils within the TSCA-regulated areas that are necessary to meet the cleanup goals outlined herein. The Remediation Contractor will determine the layout of the lateral excavation grids using GPS or survey equipment, and will conduct engineering level surveys as excavation proceeds vertically. Where possible, the Contractor will initiate excavation within the highest PCB concentration areas and then move to a less concentration areas to avoid cross-contamination. The Remediation Contractor will carefully plan logistics to provide for excavating and loading in close proximity.

4.2.2.3 Vertical Excavation Limits

The depths of the excavations are limited to depths of 4.5 ft below ground surface as described below. Precharacterization data indicate that PCB-impacted soils, soils with PCB concentration levels > 1 mg/kg were only detected in the upper 2 ft of soils, with one exception. At Geoprobe boring, HA103(OW), PCB was Sampling PCB impacted soils will generally be excavated to the depth where PCBs were not detected above 1 mg/kg which range from 2 ft to 4.5 ft bgs; excavation depths are shown on Figure 4.

Soils will be excavated to a depth equal to the base of the deepest interval where PCBs were detected at concentrations greater or equal to 1 mg/kg in both AOC-EAST, AOC-West A and AOC-WEST B. These soils will be disposed of offsite as less than 50 mg/kg PCB remediation waste.

4.2.2.4 Lateral Excavation Limits

Lateral extents of excavation for construction are beyond the limits of PCB detections (Refer to Figure 4). In AOC-WEST A and AOC West B all of the precharacterization samples are below 10 mg/kg PCBs and the final limit of the excavation will generally be defined by the excavation and removal of PCB impacted soil until achieving the remedial goal where PCBs are not detected or not detected at concentrations greater than or equal to 1 mg/kg. Excavations will extend to a maximum depth of approximately 4.5 ft bgs in AOC-WEST B and 2 ft at AOC WEST A.

In AOC-EAST precharacterization samples range from non-detect to 46.8 mg/kg PCBs and the final limit of the excavation will generally be defined by the excavation and removal of PCB impacted soil until achieving the remedial goal where PCBs are not detected or not detected at concentrations greater than or equal to 1 mg/kg. Excavations will extend to a maximum depth of approximately 2 ft bgs in AOC-EAST.

Following the soil excavation activities, the goal is that the parcel will be suitable for High Occupancy use with no further restrictions.

4.2.3 Soil Management and Off-Site Disposition

Off-site disposition of soils will be based on characterization data obtained from the multiple sampling programs established during the TSCA characterization program as follows:

- Analytical data indicated that Site soils contain concentrations of PCBs which are less than 50 ppm and will be transported to a RCRA Subtitle D landfill (Waste Management TREE in Rochester, New Hampshire) or (if approved) to ESMI in Loudon, New Hampshire. Other RCRA Subtitle D landfill or permitted treatment facilities may also be considered; if so, they will be provided to EPA for approval.

The remedial plan includes direct loading of excavated soils. However, if necessary due to Site logistics and scheduling, TSCA regulated soils may be stockpiled within the Exclusion Zone. In the event soil needs to be stored on-Site prior to transportation and disposal, it will either be stored in lined roll-off containers or placed on and covered with double-lined polyethylene sheeting to prevent water intrusion into the stockpile. Soil stockpiles will be surrounded by silt

fence or hay bales to prevent migration of PCB-contaminated soil. Haley & Aldrich will conduct supplemental on-site testing, if necessary.

If direct-loaded soil is too wet for transport, the Contractor will be required to take measures to stabilize the soil, using methods such as applying lime. Note that it is anticipated that all of the excavation activities will occur above the water table, it is not likely that the Remediation Contractor will need to stabilize wet soils prior to loading. However, if soil stabilization due to water content is required, we will confer with the EPA regarding the Remediation Contractor's means and methods prior to implementing stabilization techniques related to water content.

All operators and trucks will have proper Department of Transportation certifications and vehicle inspection certifications. Trucks transporting PCB-contaminated soils off-site to an EPA-approved facility are anticipated to enter the Site from construction entrances situated along the intersection of Cypher Street and South Boston Haul Road.

The Remediation Contractor has proposed to transport soils with PCBs less than 50ppm to Turnkey Recycling and Environmental Enterprises ("TREE"), a RCRA Subtitle D facility in Rochester, NH. We understand that, pursuant to 40 CFR 761.61, EPA approval is required for use of that facility for soils containing PCBs less than 50ppm. We understand that EPA approval of this SIP also provides approval for transport of soils with PCBs less than 50 ppm to TREE.

4.2.4 Equipment Decontamination and Dust Suppression

During excavation of soils with concentrations of PCBs less than 50 ppm the excavator bucket will be decontaminated in accordance with TSCA 40 CFR Ch. 1 §761.79. Wastewater from decontamination procedures within the TSCA area will be collected and managed as described below.

The action level for employment of dust suppression techniques is the presence of visible dust. If visible dust is observed during remedial excavation activities, the Contractor will employ dust control measures to limit airborne dust. Additionally, the Contractor will monitor dust levels within the TSCA Work Zone using portable dust meters.

Fence line monitoring will be conducted along South Boston Bypass Road and Cypher Street during soil removal activities. The fence line action level will be established at 100 ug/m³ above background conditions in accordance with EPA National Ambient Air Quality Standards that MassDEP has adopted. In the event this action level is exceeded, more stringent dust control measures will be implemented by the Contractor.

4.2.5 Decontamination and On-Site Reuse of Concrete and Nonporous Materials

Although not encountered during the Geoprobe test boring programs and not anticipated to be present beneath the Site, concrete debris, if excavated within the limits of the TSCA regulated areas will be segregated and stockpiled within the TSCA regulated areas. The concrete debris will be washed to remove loose soil, and samples of the concrete will be collected and submitted to a laboratory for analysis for PCBs using manual soxhlet extraction and EPA Method 8082. Sample collection will be conducted by drilling into the surface of representative portions of the concrete that were in contact with soils. Concrete will be segregated during

excavation and stockpiled in separate areas. Concrete with visual evidence of contamination, such as oil staining, will be stockpiled and evaluated separately.

The concrete stockpiles will be sampled and tested separately from each other to evaluate suitability for on-site reuse. The stockpiles will be no greater than 250 cy, with one composite sample composed of five subsamples from each pile as described below.

Each composite will consist of five individual samples collected from the surface of the concrete, obtained to ½-inch deep. The samples will be collected using the Region 1, EPA-New England Standard Operating Procedure for sampling concrete in the field. Individual sampling locations will be determined randomly using procedures consistent with the procedures for sampling a conical pile outlined in Subpart R, but modified for a pile with a square bottom.

If large blocks of concrete are removed in one piece and not stockpiled with other pieces, the procedure for sampling a specifically configured pile in Subpart R, modified for a ½-inch sampling depth, will be used to determine individual sample locations and the number of composite samples obtained.

Based on the results of the chemical testing, the concrete may be crushed and reused on-site as backfill. Concrete may be reused if the laboratory testing indicates PCBs are less than or equal to 1 mg/kg. Concrete exhibiting concentrations of PCBs greater than 1 mg/kg will be removed from the Site as TSCA regulated material.

Wastewater from decontamination procedures within the TSCA area will be collected and managed as described in Section 4.5 below.

Nonporous materials (such as granite blocks or boulders) proposed for on-site reuse will be power-washed and sampled in accordance with TSCA Subpart P to confirm efficacy of cleaning. Where the blocks are not in contact with soils containing PCBs above 1ppm, the Remediation Contractor proposes to power-wash the blocks and evaluate the efficacy of cleaning using visual standards prior to reuse or off-site storage/transport of the blocks.

4.3 Confirmatory Post-Excavation Soil Sampling

4.3.1 Bottom of Excavation Confirmatory Sampling

Bottom of excavation confirmatory samples will be obtained by overlaying a 1.5-meter, two dimensional grid across the excavation. The sampling points shall proceed in every direction to the extent sufficient to result in a two-dimensional grid completely overlaying the sampling area. Confirmatory samples will be collected at each point if the grid falls in the cleanup area. Samples will be analyzed according to the nine-point compositing schemes provided in the procedures outlined in the TSCA Subpart O to evaluate the concentrations of PCBs left in place at the base of the excavation. For excavations shallower than 4 ft. bgs, the sampling process will be conducted by a person standing within the excavation using a hand trowel.

OSHA 29 CFR 1926.650 Subpart P precludes a person from entering a trench deeper than 4 ft bgs without positive support of the excavation sidewalls. However, it would not be practical to install shoring in the separate part of the excavation which will extend to an assumed maximum

depth of 4.5 ft bgs. Therefore, in order to comply with OSHA regulations, it is proposed to collect the confirmatory samples at the bottom of the excavation deeper than 4 ft bgs using a remote sampler. If field conditions preclude the use of a remote sampling, the sampling will be conducted using a smoothed-edge gradall bucket using the following method:

1. The gradall bucket will skim a 3-inch thickness of soil from the bottom of the entire 1.5 meter grid.
2. The excavated material will be stockpiled on poly sheeting, and a composite sample will be collected from that stockpile using the procedures outlined in TSCA Subpart R for sampling a conical pile.

If the characterization data directly below the excavation does not meet the cleanup goal, both a discrete sample (from beneath the original characterization boring) and a composite sample will be obtained. The composite sample will be obtained using a remote sampler following modified Subpart O as described above.

The sampling procedures outlined above will be used in AOC-EAST and AOC-WEST (A and B) grids where either:

1. Existing characterization data meets the cleanup goal of less than or equal to 1 ppm directly below the soils to be excavated; or
2. The base of the excavation will extend at least 2 ft. below the depth at which PCBs were detected above the 1 ppm cleanup goal.

If neither of the two conditions outlined above are met, both a discrete sample (from beneath the original characterization boring) and a composite sample will be obtained. The composite sample will be obtained using a remote sampler following modified Subpart O as described above.

4.3.2 Sidewall Sampling

Sidewall sampling will be conducted to confirm the lateral boundaries for soils less than or equal to 1 mg/kg. Samples will be taken using the procedures outlined in TSCA Subpart O, using a similar 1.5 meter grid and nine-point compositing procedure as described above for bottom of excavation sampling to evaluate the concentration of PCBs left in place at the sidewalls of the excavation.

If post-excavation soil testing results indicate that the 1 mg/kg cleanup level has not been attained, further soil excavation and confirmatory sampling will be conducted. In AOC-EAST, if sidewall sampling will be collected from the property limits.

4.4 Backfilling

Backfill activity will commence as soon as reasonably practical after the receipt of confirmatory sample results confirming the removal of PCBs greater than 1 mg/kg at AOC-WEST (A and B) and AOC-EAST. The completed excavations will be backfilled with either compacted on-site common or off-site granular fill materials meeting project specifications and containing total PCB concentrations less than 1

mg/kg. Backfill material will be placed in lifts and compacted using vibratory equipment (or equivalent). Finish grade will be brought to the design grades for completion of planned improvements for the area.

4.5 Water Management

It is anticipated that water will need to be managed during Site activities, as described below.

4.5.1 Construction Dewatering Effluent

The excavation depths are anticipated to generally extend to a depth of 2 ft bgs for a majority of the excavation activities with a localized deeper excavation extending to a depth of approximately 4.5 ft bgs in AOC-WEST. Groundwater at this site was encountered at depths of 10 to 14 ft bgs, and therefore, excavation activities are not anticipated encounter groundwater.

4.5.2 Decontamination Wastewater

The Contractor has several options for management of decontamination wastewater:

- a. Drum independently and transport off-site to an EPA-approved receiving facility.
- b. Recharge wastewater on-site using a treatment system to achieve total PCB concentrations less than 0.5 ug/l.
- c. Discharge treated water off-Site under the NPDES RGP permit, which establishes a maximum daily discharge limit of 0.5 ug/L PCBs as analyzed using EPA Method 608.

4.6 Public Involvement

To date, there has not been public involvement at the Site. However, notification to the Chief Municipal Office and the Board of Health will be conducted prior to the initiation of remedial activities under the Release Abatement Measure (RAM) provisions under 310 CMR 40.0440 as required by the MassDEP.

4.7 Schedule

Work within the TSCA regulated areas of the site will commence as soon as possible following approval of the revised SIP. Excavation of PCB-contaminated soils at the Site and backfilling is currently expected to be completed by Winter 2012/Spring 2013.

4.8 Certification of Owner and Party Conducting Cleanup

The signed certification required by 40 CFR 761.61(a)(3)(i)(E) is provided in Appendix A.

5. CLOSING

Site cleanup will be conducted concurrent in accordance with this Self-Implementing Plan. If conditions are encountered that vary substantially from those anticipated, this plan may be revised to accommodate those conditions. Pursuant to 40 CFR 761.61(a)(3)(ii), EPA will be notified of proposed changes to this plan.

TABLES

TABLE I

SUMMARY OF HISTORICAL SOIL QUALITY DATA

MARCH AND APRIL 1992

FORMER ENERGY INTERNATIONAL PARCEL

BOSTON, MASSACHUSETTS

FILE NO. 06318-502

Client Sample ID:	MassDEP Reportable Concentration	HR-4 AREA "A"	HR-5 AREA "A"	HR-6 AREA "B"	HR-7 AREA "C"	HR-8 AREA "C"	HR-9 AREA "D"	HR-10 AREA "D2"	HR-11 AREA "D"	HR-12 AREA "E"
Sample Location ID:										
Sample Depth (ft):		1	1	5.5	2	3	1	3	1	2
Sampling Round	(RCS-1)	Initial	Initial	4th	Initial	2nd	Initial	2nd	Initial	Initial
Polychlorinated Biphenyls (PCBs) (mg/kg)										
Total PCBs	NA	ND	1.8	ND	ND	0.245	1.8	ND	ND	ND

Notes and Abbreviations:

Only compounds detected on the dates indicated are included in this table.

- : Analysis not conducted.

Bold values indicate an exceedance of the MassDEP Reportable Concentration in Soil (RCS-1).

PCBs analyzed by SW846 EPA Method 8082

Additional sampling rounds were collected after additional soil was removed during the soil excavation and remediation to confirm remediation was conducted.

This Table only includes the conformatory post-excavation sampling results as provided by CDM.

TABLE I

SUMMARY OF HISTORICAL SOIL QUALITY DATA

MARCH AND APRIL 1992

FORMER ENERGY INTERNATIONAL PARCEL

BOSTON, MASSACHUSETTS

FILE NO. 06318-502

Client Sample ID:	MassDEP Reportable Concentration	HR-13 AREA "E"	HR-14 AREA "E"	HR-15 AREA "E"	HR-16 AREA "E"	HR-17 AREA "F"	HR-18 AREA "F"
Sample Location ID:							
Sample Depth (ft):		2	2	2	2	3	3
Sampling Round	(RCS-1)	Initial	Initial	Initial	Initial	Initial	Initial
Polychlorinated Biphenyls (PCBs) (mg/kg)							
Total PCBs	NA	ND	ND	0.53	0.49	ND	1

Notes and Abbreviations:

Only compounds detected on the dates indicated are included in this

- : Analysis not conducted.

Bold values indicate an exceedance of the MassDEP Reportable Cor
PCBs analyzed by SW846 EPA Method 8082

Additional sampling rounds were collected after additional soil was re

This Table only includes the conformatory post-excavation sampling

TABLE II
SUMMARY OF SOIL QUALITY DATA
FORMER ENERGY INTERNATIONAL PARCEL
BOSTON, MASSACHUSETTS
FILE NO. 06318-502

Client Sample ID: Lab Sample ID: Sample Depth (ft): Date Sampled: Matrix:	MassDEP Reportable Concentration (RCS-1)	HA101_0-2' M96288-8 0-2 12/2/2010 Fill	HA101_0-4' M96289-3 0-4 12/2/2010 Fill	HA101_2-4' M96288-9 2-4 12/2/2010 Fill	HA101_4-8' M96289-4 4-8 12/2/2010 Fill	HA101_6-8' M96288-11 6-8 12/2/2010 Fill	HA102_0-2' M96288-1 0-2 12/2/2010 Fill	HA102_0-4' M96289-1 0-4 12/2/2010 Fill	HA102_2-4' M96288-2 2-4 12/2/2010 Fill	HA102_4-8' M96289-2 4-8 12/2/2010 Fill	HA102_6-8' M96288-4 6-8 12/2/2010 Fill	HA103_0-2' M96256-11 0-2 12/1/2010 Fill	HA103_0-4' M96257-7 0-4 12/1/2010 Fill	HA103_2-4' M96256-12 2-4 12/1/2010 Fill	HA103_4-8' M96257-8 4-8 12/1/2010 Fill	HA103_6-8' M96256-14 6-8 12/1/2010 Fill	HA103_8-12' M96257-9 8-12 12/1/2010 Fill	HA104_0-2' M96256-19 0-2 12/1/2010 Fill	HA104_0-4' M96257-5 0-4 12/1/2010 Fill	HA104_2-4' M96256-20 2-4 12/1/2010 Fill
VOCs (µg/kg)																				
Benzene	2000	-	ND (15)	-	43.6	-	-	ND (13)	-	ND (18.5)	-	-	36	-	80.8	-	ND (13.5)	-	ND (12.5)	-
Naphthalene	4000	-	ND (150)	-	426	-	-	271	-	ND (185)	-	-	267	-	557	-	738	-	ND (115)	-
Toluene	30000	-	ND (150)	-	ND (145)	-	-	ND (130)	-	395	-	-	ND (130)	-	ND (195)	-	ND (135)	-	ND (115)	-
1,2,4-Trimethylbenzene	1000000	-	ND (150)	-	ND (145)	-	-	ND (130)	-	ND (185)	-	-	ND (130)	-	ND (195)	-	ND (135)	-	ND (115)	-
Xylene (total)	300000	-	ND (60)	-	ND (55)	-	-	145	-	ND (75)	-	-	179	-	360	-	ND (55)	-	ND (47)	-
SVOCs (µg/kg)																				
Benzoic acid	1000000	-	ND (280)	-	ND (270)	-	-	ND (280)	-	ND (305)	-	-	ND (275)	-	ND (305)	-	ND (2950)	-	ND (270)	-
3&4-Methylphenol	500000	-	ND (280)	-	ND (270)	-	-	ND (280)	-	ND (305)	-	-	ND (275)	-	ND (305)	-	ND (2950)	-	ND (270)	-
Acenaphthene	4000	-	ND (140)	-	537	-	-	ND (140)	-	2790	-	-	ND (135)	-	383	-	ND (1450)	-	ND (135)	-
Acenaphthylene	1000	-	ND (140)	-	740	-	-	ND (140)	-	ND (155)	-	-	ND (135)	-	564	-	ND (1450)	-	ND (135)	-
Anthracene	1000000	-	712	-	2550	-	-	ND (140)	-	5750	-	-	641	-	1300	-	ND (1450)	-	566	-
Benzo(a)anthracene	7000	-	1400	-	7540	-	-	357	-	7760	-	-	1470	-	2810	-	4110	-	1110	-
Benzo(a)pyrene	2000	-	1100	-	5800	-	-	316	-	5270	-	-	1270	-	2190	-	3210	-	1330	-
Benzo(b)fluoranthene	7000	-	944	-	4340	-	-	296	-	3900	-	-	1330	-	2080	-	ND (1450)	-	1430	-
Benzo(g,h,i)perylene	1000000	-	624	-	2700	-	-	ND (140)	-	2370	-	-	903	-	1440	-	ND (1450)	-	1370	-
Benzo(k)fluoranthene	70000	-	823	-	4240	-	-	ND (140)	-	3870	-	-	1020	-	1950	-	ND (1450)	-	1270	-
Chrysene	70000	-	1490	-	6590	-	-	436	-	7470	-	-	1520	-	2960	-	4080	-	1450	-
Dibenzo(a,h)anthracene	700	-	ND (140)	-	1450	-	-	ND (140)	-	1190	-	-	347	-	595	-	ND (1450)	-	458	-
Dibenzofuran	100000	-	ND (140)	-	571	-	-	ND (140)	-	1800	-	-	ND (135)	-	494	-	ND (1450)	-	ND (135)	-
bis(2-Ethylhexyl)phthalate	200000	-	ND (140)	-	ND (135)	-	-	ND (140)	-	ND (155)	-	-	ND (135)	-	ND (150)	-	ND (1450)	-	ND (135)	-
Fluoranthene	1000000	-	2730	-	10700	-	-	598	-	18900	-	-	2550	-	4700	-	7980	-	1720	-
Fluorene	1000000	-	ND (140)	-	902	-	-	ND (140)	-	3340	-	-	ND (135)	-	435	-	ND (1450)	-	ND (135)	-
Indeno(1,2,3-cd)pyrene	7000	-	654	-	2900	-	-	ND (140)	-	2380	-	-	934	-	1520	-	ND (1450)	-	1310	-
2-Methylnaphthalene	700	-	ND (140)	-	299	-	-	617	-	1020	-	-	372	-	881	-	ND (1450)	-	ND (135)	-
Naphthalene	4000	-	294	-	662	-	-	ND (140)	-	1180	-	-	398	-	861	-	ND (1450)	-	ND (135)	-
Phenanthrene	10000	-	2350	-	6180	-	-	354	-	23000	-	-	2000	-	3720	-	7650	-	1070	-
Pyrene	1000000	-	2180	-	9050	-	-	630	-	11800	-	-	2370	-	4230	-	6720	-	1890	-
VPH (µg/kg)																				
C9-C10 Aromatics	100000	-	ND (3250)	-	ND (3150)	-	-	194000	-	84500	-	-	ND (2850)	-	ND (4250)	-	19300	-	ND (2550)	-
C5-C8 Aliphatics	100000	-	ND (3250)	-	ND (3150)	-	-	ND (29000)	-	ND (3950)	-	-	ND (2850)	-	ND (4250)	-	ND (2950)	-	ND (2550)	-
C9-C12 Aliphatics	1000000	-	ND (3250)	-	ND (3150)	-	-	228000	-	81800	-	-	ND (2850)	-	ND (4250)	-	13900	-	ND (2550)	-
EPH (µg/kg)																				
C9-C18 Aliphatics	1000000	-	13300	-	ND (4800)	-	-	1410000	-	278000	-	-	14800	-	27500	-	98200	-	ND (4950)	-
C19-C36 Aliphatics	3000000	-	67400	-	22500	-	-	710000	-	167000	-	-	85500	-	112000	-	117000	-	58900	-
C11-C22 Aromatics	1000000	-	88200	-	155000	-	-	739000	-	334000	-	-	138000	-	257000	-	217000	-	69900	-

TABLE II
SUMMARY OF SOIL QUALITY DATA
FORMER ENERGY INTERNATIONAL PARCEL
BOSTON, MASSACHUSETTS
FILE NO. 06318-502

Client Sample ID: Lab Sample ID: Sample Depth (ft): Date Sampled: Matrix:	MassDEP Reportable Concentration	HA101_0-2' M96288-8	HA101_0-4' M96289-3 M96289-3A	HA101_2-4' M96288-9	HA101_4-8' M96289-4 M96289-4A	HA101_6-8' M96288-11	HA102_0-2' M96288-1	HA102_0-4' M96289-1	HA102_2-4' M96288-2	HA102_4-8' M96289-2 M96289-2A	HA102_6-8' M96288-4	HA103_0-2' M96256-11	HA103_0-4' M96257-7 M96257-7A	HA103_2-4' M96256-12	HA103_4-8' M96257-8 M96257-8A	HA103_6-8' M96256-14	HA103_8-12' M96257-9 M96257-9A	HA104_0-2' M96256-19	HA104_0-4' M96257-5 M96257-5A	HA104_2-4' M96256-20
	(RCS-1)	0-2 12/2/2010 Fill	0-4 12/2/2010 Fill	2-4 12/2/2010 Fill	4-8 12/2/2010 Fill	6-8 12/2/2010 Fill	0-2 12/2/2010 Fill	0-4 12/2/2010 Fill	2-4 12/2/2010 Fill	4-8 12/2/2010 Fill	6-8 12/2/2010 Fill	0-2 12/1/2010 Fill	0-4 12/1/2010 Fill	2-4 12/1/2010 Fill	4-8 12/1/2010 Fill	6-8 12/1/2010 Fill	8-12 12/1/2010 Fill	0-2 12/1/2010 Fill	0-4 12/1/2010 Fill	2-4 12/1/2010 Fill
Metals (mg/kg)																				
Antimony	20	-	13.6	-	63.6	-	-	ND (0.43)	-	ND (0.9) a	-	-	1.4	-	3	-	ND (2.15) a	-	ND (0.42)	-
Arsenic	20	-	10.3	-	13.1	-	-	7.4	-	16.1	-	-	7.8	-	13.1	-	20.8	-	7.9	-
Barium	1000	-	80.3	-	97.8	-	-	41.2	-	70.5	-	-	57.9	-	120	-	136	-	91.4	-
Beryllium	100	-	0.4	-	ND (0.17)	-	-	0.35	-	ND (0.18)	-	-	0.37	-	0.41	-	0.35	-	0.35	-
Cadmium	2	-	0.94	-	ND (0.17)	-	-	0.4	-	0.46	-	-	0.57	-	0.96	-	0.66	-	ND (0.17)	-
Chromium	30	-	14.9	-	13.1	-	-	13.4	-	12.3	-	-	14.1	-	19.8	-	15.2	-	13.1	-
Lead	300	-	346	-	1690	-	-	83.6	-	210	-	-	175	-	284	-	411	-	268	-
Mercury	20	-	1.1	-	1.6	-	-	0.74	-	1.5	-	-	0.36	-	0.77	-	2.7	-	0.68	-
Nickel	20	-	18.5	-	14.5	-	-	14.4	-	20.1	-	-	14.4	-	18.6	-	26.3	-	12.4	-
Selenium	400	-	ND (0.415)	-	ND (0.42)	-	-	ND (0.43)	-	ND (0.445)	-	-	ND (0.41)	-	1.1	-	0.97	-	ND (0.42)	-
Silver	100	-	0.8	-	5.2	-	-	ND (0.215)	-	ND (0.225)	-	-	ND (0.205)	-	ND (0.23)	-	ND (0.215)	-	ND (0.21)	-
Vanadium	600	-	24.7	-	21.1	-	-	26.8	-	30.4	-	-	24.3	-	24.3	-	22.3	-	22.5	-
Zinc	2500	-	616	-	340	-	-	105	-	239	-	-	107	-	205	-	266	-	111	-
TCLP Metals (mg/L)																				
Lead	NA	-	0.22	-	1.9	-	-	-	-	0.48	-	-	0.043	-	0.082	-	0.35	-	0.059	-
Polychlorinated Biphenyls (PCBs) (µg/kg)																				
Aroclor 1248	2000	ND (55)	-	ND (55)	-	ND (55)	ND (60)	-	ND (50)	-	ND (60)	ND (50)	-	ND (55)	-	ND (60)	-	ND (55)	-	ND (55)
Aroclor 1254	2000	299	-	232	-	ND (55)	ND (60)	-	ND (50)	-	ND (60)	ND (50)	-	728	-	ND (60)	-	1840	-	338
Aroclor 1260	2000	187 a	-	118	-	ND (55)	ND (60)	-	ND (50)	-	ND (60)	ND (50)	-	552 a	-	ND (60)	-	ND (55)	-	315 a
Waste Characteristics																				
Corrosivity as pH	NA	-	7	-	7.2	-	-	7.4	-	7.4	-	-	8.6	-	7.4	-	7.5	-	7.9	-
Cyanide Reactivity (mg/kg)	NA	-	<1.7	-	<1.7	-	-	<1.7	-	<1.8	-	-	<1.7	-	<1.8	-	<1.8	-	<1.7	-
Ignitability (Flashpoint) (deg F)	NA	-	>230	-	>230	-	-	>230	-	>230	-	-	>230	-	>230	-	>230	-	>230	-
Redox Potential Vs H2	NA	-	425	-	429	-	-	427	-	392	-	-	402 ^b	-	413 ^b	-	394 ^b	-	407 ^b	-
Solids, Percent	NA	88.5	89	85.9	90.5	92.9	85.3	88.6	95.4	81.7	84.3	92.8	90.6	85.7	81.7	82.1	83	93.8	90.6	89.2
Sulfide Reactivity (mg/kg)	NA	-	<56	-	<55	-	-	<56	-	<61	-	-	<55	-	<61	-	<60	-	<55	-

Notes and Abbreviations:

^a Elevated RL due to dilution required for matrix interference.

^b Analysis requested after recommended holding time.

Only compounds detected on the dates indicated are included in this table.

ND (110): Compound not detected; value in parentheses is one half the laboratory reporting limit.

< : Compound not detected; value is the laboratory reporting limit.

- : Analysis not conducted.

Bold values indicate an exceedance of the MassDEP Reportable Concentration in Soil (RCS-1).

VOCs: Volatile Organic Compounds by SW846 8260B

SVOCs: Semi-volatile Organic Compounds by SW846 8270C

VPH: Volatile Petroleum Hydrocarbons by MADEP VPH REV 1.1

EPH: Extractable Petroleum Hydrocarbons by MADEP EPH REV 1.1

^a Estimated value due to the presence of other Aroclor pattern.

PCBs analyzed by SW846 EPA Method 8082

TABLE II
SUMMARY OF SOIL QUALITY DATA
FORMER ENERGY INTERNATIONAL PARCEL
BOSTON, MASSACHUSETTS
FILE NO. 06318-502

Client Sample ID: Lab Sample ID: Sample Depth (ft): Date Sampled: Matrix:	MassDEP Reportable Concentration	HA104_6-8' M96256-22	HA104_8-13.2' M96257-6 M96257-6A	HA105_0-2' M96256-8	HA105_0-4' M96257-3 M96257-3A	HA105_2-4' M96256-9	HA105_4-8' M96257-4 M96257-4A	HA105_6-8' M96256-26	HA106_0-2' M96256-1	HA106_0-4' M96257-1 M96257-1A	HA106_2-4' M96256-2	HA106_6-8' M96256-4	HA106_8-12.5' M96257-2 M96257-2A	HA107_0-2' M96226-26	HA107_0-4' M96225-7 M96225-7A	HA107_2-4' M96226-27	HA107_6-8' M96226-29	HA107_8-12' M96225-8 M96225-8A
	(RCS-1)	6-8 12/1/2010 Fill	8-13.2 12/1/2010 Fill	0-2 12/1/2010 Fill	0-4 12/1/2010 Fill	2-4 12/1/2010 Fill	4-8 12/1/2010 Fill	6-8 12/1/2010 Fill	0-2 12/1/2010 Fill	0-4 12/1/2010 Fill	2-4 12/1/2010 Fill	6-8 12/1/2010 Fill	8-12.5 11/30/2010 Fill	0-2 11/30/2010 Fill	0-4 11/30/2010 Fill	2-4 11/30/2010 Fill	6-8 11/30/2010 Fill	8-12 11/30/2010 Fill
VOCs (µg/kg)																		
Benzene	2000	-	ND (18)	-	37.7	-	ND (14.5)	-	-	ND (9.5)	-	-	102	-	31.7	-	-	ND (20.5)
Naphthalene	4000	-	2570	-	ND (120)	-	ND (145)	-	-	ND (95)	-	-	5750	-	ND (150)	-	-	1090
Toluene	30000	-	ND (180)	-	ND (120)	-	ND (145)	-	-	ND (95)	-	-	ND (160)	-	ND (150)	-	-	ND (205)
1,2,4-Trimethylbenzene	1000000	-	ND (180)	-	ND (120)	-	ND (145)	-	-	ND (95)	-	-	545	-	ND (150)	-	-	ND (205)
Xylene (total)	300000	-	ND (70)	-	ND (48.5)	-	ND (60)	-	-	ND (38.5)	-	-	466	-	ND (60)	-	-	ND (80)
SVOCs (µg/kg)																		
Benzoic acid	1000000	-	ND (310)	-	ND (280)	-	ND (290)	-	-	ND (270)	-	-	ND (6500)	-	ND (280)	-	-	ND (335)
3&4-Methylphenol	500000	-	ND (310)	-	ND (280)	-	ND (290)	-	-	ND (270)	-	-	ND (6500)	-	ND (280)	-	-	727
Acenaphthene	4000	-	992	-	ND (140)	-	ND (145)	-	-	436	-	-	ND (3150)	-	472	-	-	3830
Acenaphthylene	1000	-	ND (155)	-	ND (140)	-	ND (145)	-	-	ND (135)	-	-	9470	-	584	-	-	471
Anthracene	1000000	-	2120	-	683	-	ND (145)	-	-	914	-	-	11200	-	1760	-	-	4020
Benzo(a)anthracene	7000	-	2620	-	1320	-	ND (145)	-	-	1560	-	-	38900	-	4820	-	-	5400
Benzo(a)pyrene	2000	-	1900	-	1070	-	ND (145)	-	-	1250	-	-	16600	-	3870	-	-	3260
Benzo(b)fluoranthene	7000	-	1370	-	1040	-	ND (145)	-	-	1260	-	-	19700	-	4610	-	-	3300
Benzo(g,h,i)perylene	1000000	-	1240	-	967	-	ND (145)	-	-	1090	-	-	13500	-	1690	-	-	998
Benzo(k)fluoranthene	70000	-	1520	-	921	-	ND (145)	-	-	1050	-	-	7010	-	2970	-	-	2590
Chrysene	70000	-	2550	-	1380	-	ND (145)	-	-	1580	-	-	69200	-	5060	-	-	5550
Dibenzo(a,h)anthracene	700	-	464	-	350	-	ND (145)	-	-	379	-	-	19000	-	834	-	-	542
Dibenzofuran	100000	-	540	-	ND (140)	-	ND (145)	-	-	326	-	-	8210	-	402	-	-	2010
bis(2-Ethylhexyl)phthalate	200000	-	ND (155)	-	ND (140)	-	ND (145)	-	-	ND (135)	-	-	ND (3150)	-	ND (140)	-	-	ND (170)
Fluoranthene	1000000	-	4880	-	2280	-	514	-	-	3020	-	-	25200	-	8090	-	-	10500
Fluorene	1000000	-	1120	-	281	-	ND (145)	-	-	463	-	-	10600	-	595	-	-	3610
Indeno(1,2,3-cd)pyrene	7000	-	1190	-	937	-	ND (145)	-	-	1030	-	-	10900	-	1900	-	-	1150
2-Methylnaphthalene	700	-	385	-	ND (140)	-	ND (145)	-	-	ND (135)	-	-	9330	-	417	-	-	2010
Naphthalene	4000	-	1330	-	344	-	ND (145)	-	-	396	-	-	35100	-	675	-	-	5360
Phenanthrene	10000	-	5120	-	2070	-	564	-	-	3150	-	-	39500	-	5290	-	-	12700
Pyrene	1000000	-	4560	-	2260	-	509	-	-	2900	-	-	22600	-	5880	-	-	7840
VPH (µg/kg)																		
C9-C10 Aromatics	100000	-	ND (3900)	-	17300	-	8360	-	-	ND (2100)	-	-	18200	-	ND (3200)	-	-	ND (4350)
C5-C8 Aliphatics	100000	-	ND (3900)	-	8770	-	ND (3150)	-	-	ND (2100)	-	-	16800	-	ND (3200)	-	-	ND (4350)
C9-C12 Aliphatics	1000000	-	ND (3900)	-	ND (2650)	-	ND (3150)	-	-	ND (2100)	-	-	ND (3450)	-	ND (3200)	-	-	ND (4350)
EPH (µg/kg)																		
C9-C18 Aliphatics	1000000	-	23000	-	16700	-	ND (5500)	-	-	ND (4800)	-	-	265000	-	20100	-	-	31500
C19-C36 Aliphatics	3000000	-	83100	-	88200	-	21800	-	-	39800	-	-	4860000	-	143000	-	-	123000
C11-C22 Aromatics	1000000	-	212000	-	129000	-	ND (10500)	-	-	42500	-	-	5300000	-	294000	-	-	374000

TABLE II
SUMMARY OF SOIL QUALITY DATA
FORMER ENERGY INTERNATIONAL PARCEL
BOSTON, MASSACHUSETTS
FILE NO. 06318-502

Client Sample ID: Lab Sample ID: Sample Depth (ft): Date Sampled: Matrix:	MassDEP Reportable Concentration	HA104_6-8' M96256-22 6-8 12/1/2010 Fill	HA104_8-13.2' M96257-6 M96257-6A 8-13.2 12/1/2010 Fill	HA105_0-2' M96256-8 0-2 12/1/2010 Fill	HA105_0-4' M96257-3 M96257-3A 0-4 12/1/2010 Fill	HA105_2-4' M96256-9 2-4 12/1/2010 Fill	HA105_4-8' M96257-4 M96257-4A 4-8 12/1/2010 Fill	HA105_6-8' M96256-26 6-8 12/1/2010 Fill	HA106_0-2' M96256-1 0-2 12/1/2010 Fill	HA106_0-4' M96257-1 M96257-1A 0-4 12/1/2010 Fill	HA106_2-4' M96256-2 2-4 12/1/2010 Fill	HA106_6-8' M96256-4 6-8 12/1/2010 Fill	HA106_8-12.5' M96257-2 M96257-2A 8-12.5 11/30/2010 Fill	HA107_0-2' M96226-26 0-2 11/30/2010 Fill	HA107_0-4' M96225-7 M96225-7A 0-4 11/30/2010 Fill	HA107_2-4' M96226-27 2-4 11/30/2010 Fill	HA107_6-8' M96226-29 6-8 11/30/2010 Fill	HA107_8-12' M96225-8 M96225-8A 8-12 11/30/2010 Fill
Metals (mg/kg)																		
Antimony	20	-	1.2	-	0.88	-	ND (0.45)	-	-	ND (0.425)	-	-	7.6	-	1	-	-	ND (0.5)
Arsenic	20	-	9.5	-	8.4	-	7.2	-	-	7.8	-	-	16	-	11.2	-	-	7.8
Barium	1000	-	192	-	81.5	-	180	-	-	68.7	-	-	128	-	108	-	-	165
Beryllium	100	-	0.62	-	0.41	-	0.43	-	-	0.38	-	-	ND (0.195)	-	0.5	-	-	0.5
Cadmium	2	-	<0.36	-	0.48	-	ND (0.18)	-	-	ND (0.17)	-	-	0.75	-	0.45	-	-	ND (0.205)
Chromium	30	-	22.6	-	13.9	-	10.3	-	-	14.1	-	-	10.9	-	21.4	-	-	20.6
Lead	300	-	302	-	190	-	245	-	-	166	-	-	588	-	231	-	-	338
Mercury	20	-	1.8	-	1.4	-	0.87	-	-	0.44	-	-	1.6	-	1.4	-	-	1.8
Nickel	20	-	17.2	-	17.3	-	10.9	-	-	11.2	-	-	11.3	-	16.8	-	-	15.5
Selenium	400	-	ND (0.45)	-	ND (0.42)	-	ND (0.45)	-	-	ND (0.425)	-	-	3.9	-	1.3	-	-	ND (0.5)
Silver	100	-	ND (0.225)	-	ND (0.21)	-	ND (0.225)	-	-	ND (0.21)	-	-	1.3	-	0.81	-	-	0.77
Vanadium	600	-	32.6	-	20.8	-	17.8	-	-	19.9	-	-	16.8	-	27.5	-	-	27
Zinc	2500	-	178	-	182	-	128	-	-	88.7	-	-	372	-	214	-	-	198
TCLP Metals (mg/L)																		
Lead	NA	-	0.74	-	0.36	-	0.46	-	-	0.28	-	-	1.7	-	0.15	-	-	0.5
Polychlorinated Biphenyls (PCBs) (µg/kg)																		
Aroclor 1248	2000	ND (65)	-	ND (50)	-	132 a	-	ND (65)	ND (49.5)	-	ND (60)	ND (65)	-	ND (55)	-	ND (60)	ND (70)	-
Aroclor 1254	2000	ND (65)	-	ND (50)	-	379	-	ND (65)	ND (49.5)	-	ND (60)	ND (65)	-	276	-	567	ND (70)	-
Aroclor 1260	2000	ND (65)	-	ND (50)	-	308 a	-	ND (65)	ND (49.5)	-	147	ND (65)	-	ND (55)	-	463 a	ND (70)	-
Waste Characteristics																		
Corrosivity as pH	NA	-	7.8	-	8	-	7.7	-	-	8.4	-	-	7.5	-	7.8	-	-	7.7
Cyanide Reactivity (mg/kg)	NA	-	<1.9	-	<1.7	-	<1.8	-	-	<1.7	-	-	<1.9	-	<1.7	-	-	<2.0
Ignitability (Flashpoint) (deg F)	NA	-	>230	-	>230	-	>230	-	-	>230	-	-	>230	-	>230	-	-	>230
Redox Potential Vs H2	NA	-	371 ^b	-	364 ^b	-	387 ^b	-	-	446 ^b	-	-	322 ^b	-	441 ^b	-	-	426 ^b
Solids, Percent	NA	71.8	80.1	95.7	89.1	87.5	84.9	77.1	94.9	90.8	81.6	79.3	79.7	92.7	88.4	85	68.6	73.4
Sulfide Reactivity (mg/kg)	NA	-	<62	-	<56	-	<59	-	-	<55	-	-	<63	-	<57	-	-	<68

Notes and Abbreviations:
^a Elevated RL due to dilution required for matrix interference.
^b Analysis requested after recommended holding time.
Only compounds detected on the dates indicated are included in this table.
ND (110): Compound not detected; value in parentheses is one half the laboratory reporting limit.
< : Compound not detected; value is the laboratory reporting limit.
- : Analysis not conducted.
Bold values indicate an exceedance of the MassDEP Reportable Concentration in Soil (RCS-1).
VOCs: Volatile Organic Compounds by SW846 8260B
SVOCs: Semi-volatile Organic Compounds by SW846 8270C
VPH: Volatile Petroleum Hydrocarbons by MADEP VPH REV 1.1
EPH: Extractable Petroleum Hydrocarbons by MADEP EPH REV 1
^a Estimated value due to the presence of other Aroclor pattern.
PCBs analyzed by SW846 EPA Method 8082

TABLE II
SUMMARY OF SOIL QUALITY DATA
FORMER ENERGY INTERNATIONAL PARCEL
BOSTON, MASSACHUSETTS
FILE NO. 06318-502

Client Sample ID: Lab Sample ID: Sample Depth (ft): Date Sampled: Matrix:	MassDEP Reportable Concentration	HA108_0-2' M96226-19 0-2 11/30/2010 Fill	HA108_0-4' M96225-5 M96225-5A 0-4 11/30/2010 Fill	HA108_2-4' M96226-20 2-4 11/30/2010 Fill	HA108_4-8' M96225-6 M96225-6A 4-8 11/30/2010 Fill	HA108_6-8' M96226-22 6-8 11/30/2010 Fill	HA109_0-2' M96226-10 0-2 11/30/2010 Fill	HA109_0-4' M96225-3 M96225-3A 0-4 11/30/2010 Fill	HA109_2-4' M96226-11 2-4 11/30/2010 Fill	HA109_6-8' M96226-13 6-8 11/30/2010 Fill	HA109_8-12' M96225-4 M96225-4A 8-12 11/30/2010 Fill	HA110_0-2' M96226-1 0-2 11/30/2010 Fill	HA110_0-4' M96225-1 M96225-1A 0-4 11/30/2010 Fill	HA110_2-4' M96226-2 2-4 11/30/2010 Fill	HA110_4-8' M96225-2 M96225-2A 4-8 11/30/2010 Fill	HA110_6-8' M96226-4 6-8 11/30/2010 Fill	HA111_0-2' M96200-19 0-2 11/29/2010 Fill	HA111_0-4' M96199-5 M96199-5A 0-4 11/29/2010 Fill
VOCs (µg/kg)																		
Benzene	2000	-	31	-	ND (18.5)	-	-	74.5	-	-	ND (16)	-	35.5	-	ND (16.5)	-	-	ND (14)
Naphthalene	4000	-	665	-	ND (185)	-	-	2080	-	-	1540	-	357	-	ND (165)	-	-	ND (140)
Toluene	30000	-	ND (145)	-	ND (185)	-	-	ND (165)	-	-	ND (160)	-	ND (140)	-	ND (165)	-	-	ND (140)
1,2,4-Trimethylbenzene	1000000	-	ND (145)	-	ND (185)	-	-	ND (165)	-	-	ND (160)	-	ND (140)	-	ND (165)	-	-	ND (140)
Xylene (total)	300000	-	ND (60)	-	ND (75)	-	-	154	-	-	ND (65)	-	120	-	ND (65)	-	-	ND (55)
SVOCs (µg/kg)																		
Benzoic acid	1000000	-	ND (280)	-	ND (295)	-	-	ND (2700)	-	-	ND (285)	-	685	-	ND (300)	-	-	ND (275)
3&4-Methylphenol	500000	-	ND (280)	-	ND (295)	-	-	ND (2700)	-	-	ND (285)	-	ND (285)	-	ND (300)	-	-	ND (275)
Acenaphthene	4000	-	297	-	1040	-	-	5850	-	-	468	-	2130	-	1040	-	-	ND (140)
Acenaphthylene	1000	-	375	-	ND (145)	-	-	ND (1350)	-	-	340	-	980	-	625	-	-	ND (140)
Anthracene	1000000	-	996	-	ND (145)	-	-	16000	-	-	1140	-	5630	-	3470	-	-	536
Benzo(a)anthracene	7000	-	2620	-	ND (145)	-	-	42700	-	-	2440	-	16800	-	6020	-	-	1660
Benzo(a)pyrene	2000	-	2160	-	ND (145)	-	-	27400	-	-	1900	-	9720	-	2510	-	-	1390
Benzo(b)fluoranthene	7000	-	2380	-	ND (145)	-	-	20900	-	-	1930	-	11000	-	3660	-	-	1310
Benzo(g,h,i)perylene	1000000	-	923	-	ND (145)	-	-	9820	-	-	898	-	3880	-	1280	-	-	672
Benzo(k)fluoranthene	70000	-	1910	-	ND (145)	-	-	14800	-	-	1560	-	5560	-	3470	-	-	1130
Chrysene	70000	-	2780	-	ND (145)	-	-	50500	-	-	2550	-	16600	-	5900	-	-	1760
Dibenzo(a,h)anthracene	700	-	438	-	ND (145)	-	-	5730	-	-	533	-	2380	-	942	-	-	314
Dibenzofuran	100000	-	ND (140)	-	ND (145)	-	-	ND (1350)	-	-	474	-	1630	-	904	-	-	ND (140)
bis(2-Ethylhexyl)phthalate	200000	-	ND (140)	-	ND (145)	-	-	ND (1350)	-	-	ND (145)	-	ND (140)	-	ND (150)	-	-	ND (140)
Fluoranthene	1000000	-	4500	-	785	-	-	47700	-	-	4240	-	31500	-	10500	-	-	2940
Fluorene	1000000	-	354	-	ND (145)	-	-	6230	-	-	582	-	2410	-	1630	-	-	ND (140)
Indeno(1,2,3-cd)pyrene	7000	-	1060	-	ND (145)	-	-	9810	-	-	980	-	4540	-	1520	-	-	735
2-Methylnaphthalene	700	-	351	-	ND (145)	-	-	ND (1350)	-	-	565	-	1010	-	443	-	-	ND (140)
Naphthalene	4000	-	549	-	563	-	-	ND (1350)	-	-	942	-	2530	-	1440	-	-	ND (140)
Phenanthrene	10000	-	3080	-	832	-	-	57700	-	-	3520	-	23200	-	8360	-	-	2100
Pyrene	1000000	-	3230	-	525	-	-	55500	-	-	3440	-	27200	-	7950	-	-	2330
VPH (µg/kg)																		
C9-C10 Aromatics	100000	-	ND (3150)	-	ND (4050)	-	-	ND (36000)	-	-	ND (3500)	-	ND (3050)	-	ND (3600)	-	-	ND (3000)
C5-C8 Aliphatics	100000	-	ND (3150)	-	ND (4050)	-	-	ND (36000)	-	-	ND (3500)	-	ND (3050)	-	ND (3600)	-	-	ND (3000)
C9-C12 Aliphatics	1000000	-	ND (3150)	-	ND (4050)	-	-	ND (36000)	-	-	ND (3500)	-	ND (3050)	-	ND (3600)	-	-	ND (3000)
EPH (µg/kg)																		
C9-C18 Aliphatics	1000000	-	22300	-	13700	-	-	15400	-	-	24800	-	21000	-	27200	-	-	ND (4700)
C19-C36 Aliphatics	3000000	-	111000	-	ND (5500)	-	-	255000	-	-	107000	-	102000	-	106000	-	-	12000
C11-C22 Aromatics	1000000	-	135000	-	35800	-	-	1130000	-	-	134000	-	351000	-	154000	-	-	46900

TABLE II
SUMMARY OF SOIL QUALITY DATA
FORMER ENERGY INTERNATIONAL PARCEL
BOSTON, MASSACHUSETTS
FILE NO. 06318-502

Client Sample ID: Lab Sample ID: Sample Depth (ft): Date Sampled: Matrix:	MassDEP Reportable Concentration	HA108_0-2' M96226-19	HA108_0-4' M96225-5 M96225-5A	HA108_2-4' M96226-20	HA108_4-8' M96225-6 M96225-6A	HA108_6-8' M96226-22	HA109_0-2' M96226-10	HA109_0-4' M96225-3 M96225-3A	HA109_2-4' M96226-11	HA109_6-8' M96226-13	HA109_8-12' M96225-4 M96225-4A	HA110_0-2' M96226-1	HA110_0-4' M96225-1 M96225-1A	HA110_2-4' M96226-2	HA110_4-8' M96225-2 M96225-2A	HA110_6-8' M96226-4	HA111_0-2' M96200-19	HA111_0-4' M96199-5 M96199-5A
	(RCS-1)	0-2 11/30/2010 Fill	0-4 11/30/2010 Fill	2-4 11/30/2010 Fill	4-8 11/30/2010 Fill	6-8 11/30/2010 Fill	0-2 11/30/2010 Fill	0-4 11/30/2010 Fill	2-4 11/30/2010 Fill	6-8 11/30/2010 Fill	8-12 11/30/2010 Fill	0-2 11/30/2010 Fill	0-4 11/30/2010 Fill	2-4 11/30/2010 Fill	4-8 11/30/2010 Fill	6-8 11/30/2010 Fill	0-2 11/29/2010 Fill	0-4 11/29/2010 Fill
Metals (mg/kg)																		
Antimony	20	-	0.99	-	1.3	-	-	ND (0.415)	-	-	3.3	-	ND (0.445)	-	ND (0.43)	-	-	2.4
Arsenic	20	-	8.3	-	7.5	-	-	7.5	-	-	15.5	-	11.7	-	14.1	-	-	18.9
Barium	1000	-	81.4	-	97	-	-	106	-	-	144	-	134	-	147	-	-	198
Beryllium	100	-	0.47	-	0.39	-	-	0.48	-	-	0.47	-	0.45	-	0.47	-	-	0.65
Cadmium	2	-	0.57	-	ND (0.175)	-	-	1.5	-	-	1.1	-	0.51	-	0.65	-	-	0.54
Chromium	30	-	15.8	-	7.9	-	-	14.3	-	-	15.8	-	14.8	-	17.5	-	-	17.6
Lead	300	-	277	-	229	-	-	288	-	-	689	-	150	-	319	-	-	912
Mercury	20	-	1.1	-	0.59	-	-	1.2	-	-	10.7	-	1.3	-	4.8	-	-	0.53
Nickel	20	-	13.7	-	10.8	-	-	12.3	-	-	15.4	-	18.8	-	20.6	-	-	15.4
Selenium	400	-	ND (0.43)	-	1.4	-	-	ND (0.415)	-	-	1.5	-	ND (0.445)	-	0.95	-	-	0.97
Silver	100	-	ND (0.215)	-	ND (0.215)	-	-	ND (0.21)	-	-	1	-	ND (0.22)	-	0.73	-	-	ND (0.21)
Vanadium	600	-	25.6	-	14.8	-	-	25.7	-	-	23.3	-	21.3	-	27	-	-	24.6
Zinc	2500	-	188	-	169	-	-	267	-	-	353	-	167	-	237	-	-	145
TCLP Metals (mg/L)																		
Lead	NA	-	0.42	-	0.88	-	-	0.012	-	-	2.5	-	0.015	-	0.94	-	-	0.56
Polychlorinated Biphenyls (PCBs) (µg/kg)																		
Aroclor 1248	2000	ND (60)	-	ND (55)	-	ND (60)	ND (55)	-	ND (55)	ND (55)	-	ND (60)	-	ND (55)	-	ND (55)	1140 E a	-
Aroclor 1254	2000	242 a	-	244	-	ND (60)	ND (55)	-	341 a	115	-	172	-	549	-	ND (55)	4470 a	-
Aroclor 1260	2000	310 a	-	ND (55)	-	ND (60)	ND (55)	-	353	ND (55)	-	136 a	-	457 a	-	ND (55)	6020	-
Waste Characteristics																		
Corrosivity as pH	NA	-	8	-	7.8	-	-	10.4	-	-	7.6	-	10.7	-	8.7	-	-	7.7
Cyanide Reactivity (mg/kg)	NA	-	<1.7	-	<1.8	-	-	<1.7	-	-	<1.8	-	<1.7	-	<1.8	-	-	<1.7
Ignitability (Flashpoint) (deg F)	NA	-	>230	-	>230	-	-	>230	-	-	>230	-	>230	-	>230	-	-	>230
Redox Potential Vs H2	NA	-	425 ^b	-	427 ^b	-	-	383 ^b	-	-	407 ^b	-	342 ^b	-	385 ^b	-	-	402 ^b
Solids, Percent	NA	85.1	87.4	85	83.3	84.3	87.9	88.8	83.6	87	83.8	85.1	87.5	89	83.5	84.9	87.7	89.1
Sulfide Reactivity (mg/kg)	NA	-	<57	-	<60	-	-	<56	-	-	<60	-	<57	-	<60	-	-	<56

Notes and Abbreviations:
^a Elevated RL due to dilution required for matrix interference.
^b Analysis requested after recommended holding time.
Only compounds detected on the dates indicated are included in this table.
ND (110): Compound not detected; value in parentheses is one half the laboratory reporting limit.
< : Compound not detected; value is the laboratory reporting limit.
- : Analysis not conducted.
Bold values indicate an exceedance of the MassDEP Reportable Concentration in Soil (RCS-1).
VOCs: Volatile Organic Compounds by SW846 8260B
SVOCs: Semi-volatile Organic Compounds by SW846 8270C
VPH: Volatile Petroleum Hydrocarbons by MADEP VPH REV 1.1
EPH: Extractable Petroleum Hydrocarbons by MADEP EPH REV 1
^a Estimated value due to the presence of other Aroclor pattern.
PCBs analyzed by SW846 EPA Method 8082

TABLE II
SUMMARY OF SOIL QUALITY DATA
FORMER ENERGY INTERNATIONAL PARCEL
BOSTON, MASSACHUSETTS
FILE NO. 06318-502

Client Sample ID:	MassDEP Reportable Concentration	HA111_2-4'	HA111_6-8'	HA111_8-10'	HA111_8-12'	HA111_10-12'	HA111_12-14'	HA111_14-16'	HA111_16-18'	HA112_0-2'	HA112_0-4'	HA112_2-4'	HA112_4-8'	HA112_6-8'	HA112_8-10'	HA112_10-12'	HA112_12-14'	HA112_14-16.5'	HA112_16.5-18'	
Lab Sample ID:		M96200-20	M96200-22	M96200-23	M96199-6	M96200-24	M96200-25	M96200-26	M96200-27	M96200-1	M96199-1 M96199-1A	M96200-2	M96199-2 M96199-2A	M96200-4	M96200-5	M96200-6	M96200-10	M96200-7	M96200-8	
Sample Depth (ft):		2-4	6-8	8-10	8-12	10-12	12-14	14-16	16-18	0-2	0-4	2-4	4-8	6-8	8-10	10-12	12-14	14-16.5	16.5-18	
Date Sampled:	(RCS-1)	11/29/2010	11/29/2010	11/29/2010	11/29/2010	11/29/2010	11/29/2010	11/29/2010	11/29/2010	11/29/2010	11/29/2010	11/29/2010	11/29/2010	11/29/2010	11/29/2010	11/29/2010	11/29/2010	11/29/2010	11/29/2010	
Matrix:		Fill	Fill	Fill	Fill	Fill	Fill	Fill	Organics	Fill	Fill	Fill	Fill	Fill	Fill	Fill	Fill	Fill	Organics	
VOCs (µg/kg)																				
Benzene	2000	-	-	-	ND (24)	-	-	-	-	-	ND (13)	-	ND (18.5)	-	-	-	-	-	-	
Naphthalene	4000	-	-	-	1510	-	-	-	-	-	385	-	ND (185)	-	-	-	-	-	-	
Toluene	30000	-	-	-	ND (240)	-	-	-	-	-	ND (130)	-	ND (185)	-	-	-	-	-	-	
1,2,4-Trimethylbenzene	1000000	-	-	-	ND (240)	-	-	-	-	-	ND (130)	-	ND (185)	-	-	-	-	-	-	
Xylene (total)	300000	-	-	-	ND (95)	-	-	-	-	-	ND (55)	-	ND (75)	-	-	-	-	-	-	
SVOCs (µg/kg)																				
Benzoic acid	1000000	-	-	-	ND (365)	-	-	-	-	-	634	-	771	-	-	-	-	-	-	
3&4-Methylphenol	500000	-	-	-	850	-	-	-	-	-	ND (260)	-	ND (295)	-	-	-	-	-	-	
Acenaphthene	4000	-	-	-	1840	-	-	-	-	-	705	-	829	-	-	-	-	-	-	
Acenaphthylene	1000	-	-	-	651	-	-	-	-	-	1580	-	724	-	-	-	-	-	-	
Anthracene	1000000	-	-	-	4850	-	-	-	-	-	3700	-	2610	-	-	-	-	-	-	
Benzo(a)anthracene	7000	-	-	-	7650	-	-	-	-	-	9030	-	4970	-	-	-	-	-	-	
Benzo(a)pyrene	2000	-	-	-	3890	-	-	-	-	-	6950	-	3930	-	-	-	-	-	-	
Benzo(b)fluoranthene	7000	-	-	-	3490	-	-	-	-	-	7450	-	3690	-	-	-	-	-	-	
Benzo(g,h,i)perylene	1000000	-	-	-	1410	-	-	-	-	-	3870	-	2000	-	-	-	-	-	-	
Benzo(k)fluoranthene	70000	-	-	-	2970	-	-	-	-	-	4280	-	3210	-	-	-	-	-	-	
Chrysene	70000	-	-	-	7470	-	-	-	-	-	9170	-	5140	-	-	-	-	-	-	
Dibenzo(a,h)anthracene	700	-	-	-	696	-	-	-	-	-	2260	-	1120	-	-	-	-	-	-	
Dibenzofuran	100000	-	-	-	1920	-	-	-	-	-	1150	-	986	-	-	-	-	-	-	
bis(2-Ethylhexyl)phthalate	200000	-	-	-	409	-	-	-	-	-	ND (130)	-	ND (145)	-	-	-	-	-	-	
Fluoranthene	1000000	-	-	-	12100	-	-	-	-	-	22000	-	8940	-	-	-	-	-	-	
Fluorene	1000000	-	-	-	3130	-	-	-	-	-	1190	-	1240	-	-	-	-	-	-	
Indeno(1,2,3-cd)pyrene	7000	-	-	-	1600	-	-	-	-	-	4260	-	2140	-	-	-	-	-	-	
2-Methylnaphthalene	700	-	-	-	1270	-	-	-	-	-	318	-	501	-	-	-	-	-	-	
Naphthalene	4000	-	-	-	6010	-	-	-	-	-	628	-	954	-	-	-	-	-	-	
Phenanthrene	10000	-	-	-	10400	-	-	-	-	-	18400	-	7940	-	-	-	-	-	-	
Pyrene	1000000	-	-	-	12100	-	-	-	-	-	19500	-	7230	-	-	-	-	-	-	
VPH (µg/kg)																				
C9-C10 Aromatics	100000	-	-	-	ND (5000)	-	-	-	-	-	ND (2900)	-	ND (4000)	-	-	-	-	-	-	
C5-C8 Aliphatics	100000	-	-	-	ND (5000)	-	-	-	-	-	ND (2900)	-	10300	-	-	-	-	-	-	
C9-C12 Aliphatics	1000000	-	-	-	ND (5000)	-	-	-	-	-	ND (2900)	-	ND (4000)	-	-	-	-	-	-	
EPH (µg/kg)																				
C9-C18 Aliphatics	1000000	-	-	-	54500	-	-	-	-	-	12100	-	31100	-	-	-	-	-	-	
C19-C36 Aliphatics	3000000	-	-	-	143000	-	-	-	-	-	58200	-	77700	-	-	-	-	-	-	
C11-C22 Aromatics	1000000	-	-	-	161000	-	-	-	-	-	325000	-	74100	-	-	-	-	-	-	

TABLE II
SUMMARY OF SOIL QUALITY DATA
FORMER ENERGY INTERNATIONAL PARCEL
BOSTON, MASSACHUSETTS
FILE NO. 06318-502

Client Sample ID: Lab Sample ID: Sample Depth (ft): Date Sampled: Matrix:	MassDEP Reportable Concentration (RCS-1)	HA111_2-4' M96200-20 2-4 11/29/2010 Fill	HA111_6-8' M96200-22 6-8 11/29/2010 Fill	HA111_8-10' M96200-23 8-10 11/29/2010 Fill	HA111_8-12' M96199-6 8-12 11/29/2010 Fill	HA111_10-12' M96200-24 10-12 11/29/2010 Fill	HA111_12-14' M96200-25 12-14 11/29/2010 Fill	HA111_14-16' M96200-26 14-16 11/29/2010 Fill	HA111_16-18' M96200-27 16-18 11/29/2010 Organics	HA112_0-2' M96200-1 0-2 11/29/2010 Fill	HA112_0-4' M96199-1 M96199-1A 0-4 11/29/2010 Fill	HA112_2-4' M96200-2 2-4 11/29/2010 Fill	HA112_4-8' M96199-2 M96199-2A 4-8 11/29/2010 Fill	HA112_6-8' M96200-4 6-8 11/29/2010 Fill	HA112_8-10' M96200-5 8-10 11/29/2010 Fill	HA112_10-12' M96200-6 10-12 11/29/2010 Fill	HA112_12-14' M96200-10 12-14 11/29/2010 Fill	HA112_14-16.5' M96200-7 14-16.5 11/29/2010 Fill	HA112_16.5-18' M96200-8 16.5-18 11/29/2010 Organics
Metals (mg/kg)																			
Antimony	20	-	-	-	ND (0.55)	-	-	-	-	-	ND (0.405)	-	ND (0.435)	-	-	-	-	-	-
Arsenic	20	-	-	-	6.2	-	-	-	-	-	6.9	-	12.4	-	-	-	-	-	-
Barium	1000	-	-	-	55.8	-	-	-	-	-	71.4	-	109	-	-	-	-	-	-
Beryllium	100	-	-	-	0.56	-	-	-	-	-	0.45	-	0.5	-	-	-	-	-	-
Cadmium	2	-	-	-	ND (0.22)	-	-	-	-	-	0.66	-	0.78	-	-	-	-	-	-
Chromium	30	-	-	-	22	-	-	-	-	-	8.9	-	17.3	-	-	-	-	-	-
Lead	300	-	-	-	82.8	-	-	-	-	-	722	-	335	-	-	-	-	-	-
Mercury	20	-	-	-	1.4	-	-	-	-	-	0.69	-	0.98	-	-	-	-	-	-
Nickel	20	-	-	-	14.1	-	-	-	-	-	9.7	-	17.1	-	-	-	-	-	-
Selenium	400	-	-	-	ND (0.55)	-	-	-	-	-	ND (0.405)	-	2	-	-	-	-	-	-
Silver	100	-	-	-	ND (0.275)	-	-	-	-	-	ND (0.205)	-	ND (0.215)	-	-	-	-	-	-
Vanadium	600	-	-	-	28.3	-	-	-	-	-	17	-	26.9	-	-	-	-	-	-
Zinc	2500	-	-	-	70.3	-	-	-	-	-	172	-	682	-	-	-	-	-	-
TCLP Metals (mg/L)																			
Lead	NA	-	-	-	-	-	-	-	-	-	1.8	-	0.56	-	-	-	-	-	-
Polychlorinated Biphenyls (PCBs) (µg/kg)																			
Aroclor 1248	2000	ND (60)	ND (70)	ND (75)	-	ND (80)	ND (70)	ND (80)	ND (80)	ND (55)	-	ND (50)	-	ND (55)	ND (55)	ND (65)	ND (60)	ND (60)	ND (75)
Aroclor 1254	2000	ND (60)	ND (70)	ND (75)	-	ND (80)	ND (70)	ND (80)	ND (80)	ND (55)	-	ND (50)	-	ND (55)	ND (55)	ND (65)	ND (60)	ND (60)	ND (75)
Aroclor 1260	2000	ND (60)	ND (70)	ND (75)	-	ND (80)	ND (70)	ND (80)	ND (80)	ND (55)	-	ND (50)	-	ND (55)	ND (55)	ND (65)	ND (60)	ND (60)	ND (75)
Waste Characteristics																			
Corrosivity as pH	NA	-	-	-	8	-	-	-	-	-	6.9	-	7.4	-	-	-	-	-	-
Cyanide Reactivity (mg/kg)	NA	-	-	-	<2.2	-	-	-	-	-	<1.6	-	<1.8	-	-	-	-	-	-
Ignitability (Flashpoint) (deg F)	NA	-	-	-	>230	-	-	-	-	-	>230	-	>230	-	-	-	-	-	-
Redox Potential Vs H2	NA	-	-	-	326 ^b	-	-	-	-	-	380 ^b	-	384 ^b	-	-	-	-	-	-
Solids, Percent	NA	85.8	70.2	63.9	67.3	63	71.6	61.7	60.2	90.9	91.9	91.5	82.7	82.8	85.3	70.9	79.8	79.4	63.2
Sulfide Reactivity (mg/kg)	NA	-	-	-	<74	-	-	-	-	-	<54	-	<60	-	-	-	-	-	-

Notes and Abbreviations:
^a Elevated RL due to dilution required for matrix interference.
^b Analysis requested after recommended holding time.
Only compounds detected on the dates indicated are included in this table.
ND (110): Compound not detected; value in parentheses is one half the laboratory reporting limit.
< : Compound not detected; value is the laboratory reporting limit.
- : Analysis not conducted.
Bold values indicate an exceedance of the MassDEP Reportable Concentration in Soil (RCS-1).
VOCs: Volatile Organic Compounds by SW846 8260B
SVOCs: Semi-volatile Organic Compounds by SW846 8270C
VPH: Volatile Petroleum Hydrocarbons by MADEP VPH REV 1.1
EPH: Extractable Petroleum Hydrocarbons by MADEP EPH REV 1
^a Estimated value due to the presence of other Aroclor pattern.
PCBs analyzed by SW846 EPA Method 8082

TABLE II
SUMMARY OF SOIL QUALITY DATA
FORMER ENERGY INTERNATIONAL PARCEL
BOSTON, MASSACHUSETTS
FILE NO. 06318-502

Client Sample ID: Lab Sample ID: Sample Depth (ft): Date Sampled: Matrix:	MassDEP Reportable Concentration (RCS-1)	HA113_0-2' M96200-9 0-2 11/29/2010 Fill	HA113_0-4' M96199-3 0-4 11/29/2010 Fill	HA113_2-4' M96200-11 2-4 11/29/2010 Fill	HA113_6-8' M96200-13 6-8 11/29/2010 Fill	HA113_8-10' M96200-14 8-10 11/29/2010 Fill	HA113_10-12' M96200-15 10-12 11/29/2010 Fill	HA113_12-14' M96200-16 12-14 11/29/2010 Fill	HA113_12-15.5' M96199-4 12-15.5 11/29/2010 Fill	HA113_14-15.5' M96200-17 14-15.5 11/29/2010 Fill	HA113_15.5-18' M96200-18 15.5-18 11/29/2010 Organics	HA-201 S1 L1203640-01 0-0.5 3/2/2012 Fill	HA-201 S1B L1203640-06 Dup of B201 S1 0-0.5 3/2/2012 Fill	HA-201 S2 L1203640-02 1-2 3/2/2012 Fill	HA-201 S3 L1203640-03 2-3 3/2/2012 Fill	HA-202 S1 L1203630-01 0-0.5 3/2/2012 Fill	HA-202 S2 L1203630-02 1-2 3/2/2012 Fill	HA-202 S3 L1203630-03 2-3 3/2/2012 Fill
VOCs (µg/kg)																		
Benzene	2000	-	ND (17.5)	-	-	-	-	-	ND (22)	-	-	-	-	-	-	-	-	-
Naphthalene	4000	-	ND (175)	-	-	-	-	-	1860	-	-	-	-	-	-	-	-	-
Toluene	30000	-	ND (175)	-	-	-	-	-	ND (220)	-	-	-	-	-	-	-	-	-
1,2,4-Trimethylbenzene	1000000	-	ND (175)	-	-	-	-	-	ND (220)	-	-	-	-	-	-	-	-	-
Xylene (total)	300000	-	ND (70)	-	-	-	-	-	ND (90)	-	-	-	-	-	-	-	-	-
SVOCs (µg/kg)																		
Benzoic acid	1000000	-	ND (290)	-	-	-	-	-	ND (310)	-	-	-	-	-	-	-	-	-
3&4-Methylphenol	500000	-	ND (290)	-	-	-	-	-	ND (310)	-	-	-	-	-	-	-	-	-
Acenaphthene	4000	-	654	-	-	-	-	-	ND (155)	-	-	-	-	-	-	-	-	-
Acenaphthylene	1000	-	588	-	-	-	-	-	ND (155)	-	-	-	-	-	-	-	-	-
Anthracene	1000000	-	1860	-	-	-	-	-	527	-	-	-	-	-	-	-	-	-
Benzo(a)anthracene	7000	-	3810	-	-	-	-	-	750	-	-	-	-	-	-	-	-	-
Benzo(a)pyrene	2000	-	3060	-	-	-	-	-	554	-	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	7000	-	3230	-	-	-	-	-	464	-	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	1000000	-	1560	-	-	-	-	-	ND (155)	-	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	70000	-	2650	-	-	-	-	-	456	-	-	-	-	-	-	-	-	-
Chrysene	70000	-	4280	-	-	-	-	-	784	-	-	-	-	-	-	-	-	-
Dibenzo(a,h)anthracene	700	-	664	-	-	-	-	-	ND (155)	-	-	-	-	-	-	-	-	-
Dibenzofuran	100000	-	685	-	-	-	-	-	ND (155)	-	-	-	-	-	-	-	-	-
bis(2-Ethylhexyl)phthalate	200000	-	ND (145)	-	-	-	-	-	ND (155)	-	-	-	-	-	-	-	-	-
Fluoranthene	1000000	-	7520	-	-	-	-	-	1490	-	-	-	-	-	-	-	-	-
Fluorene	1000000	-	804	-	-	-	-	-	357	-	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	7000	-	1750	-	-	-	-	-	ND (155)	-	-	-	-	-	-	-	-	-
2-Methylnaphthalene	700	-	346	-	-	-	-	-	ND (155)	-	-	-	-	-	-	-	-	-
Naphthalene	4000	-	581	-	-	-	-	-	1710	-	-	-	-	-	-	-	-	-
Phenanthrene	10000	-	6490	-	-	-	-	-	1330	-	-	-	-	-	-	-	-	-
Pyrene	1000000	-	5480	-	-	-	-	-	1070	-	-	-	-	-	-	-	-	-
VPH (µg/kg)																		
C9-C10 Aromatics	100000	-	ND (3800)	-	-	-	-	-	ND (4750)	-	-	-	-	-	-	-	-	-
C5-C8 Aliphatics	100000	-	ND (3800)	-	-	-	-	-	ND (4750)	-	-	-	-	-	-	-	-	-
C9-C12 Aliphatics	1000000	-	ND (3800)	-	-	-	-	-	ND (4750)	-	-	-	-	-	-	-	-	-
EPH (µg/kg)																		
C9-C18 Aliphatics	1000000	-	102000	-	-	-	-	-	23200	-	-	-	-	-	-	-	-	-
C19-C36 Aliphatics	3000000	-	281000	-	-	-	-	-	63100	-	-	-	-	-	-	-	-	-
C11-C22 Aromatics	1000000	-	157000	-	-	-	-	-	122000	-	-	-	-	-	-	-	-	-

TABLE II
SUMMARY OF SOIL QUALITY DATA
FORMER ENERGY INTERNATIONAL PARCEL
BOSTON, MASSACHUSETTS
FILE NO. 06318-502

Client Sample ID: Lab Sample ID: Sample Depth (ft): Date Sampled: Matrix:	MassDEP Reportable Concentration (RCS-1)	HA113_0-2' M96200-9 0-2 11/29/2010 Fill	HA113_0-4' M96199-3 M96199-3A 0-4 11/29/2010 Fill	HA113_2-4' M96200-11 2-4 11/29/2010 Fill	HA113_6-8' M96200-13 6-8 11/29/2010 Fill	HA113_8-10' M96200-14 8-10 11/29/2010 Fill	HA113_10-12 M96200-15 10-12 11/29/2010 Fill	HA113_12-14' M96200-16 12-14 11/29/2010 Fill	HA113_12-15.5' M96199-4 12-15.5 11/29/2010 Fill	HA113_14-15.5' M96200-17 14-15.5 11/29/2010 Fill	HA113_15.5-18' M96200-18 15.5-18 11/29/2010 Organics	HA-201 S1 L1203640-01 0-0.5 3/2/2012 Fill	HA-201 S1B L1203640-06 Dup of B201 S1 0-0.5 3/2/2012 Fill	HA-201 S2 L1203640-02 1-2 3/2/2012 Fill	HA-201 S3 L1203640-03 2-3 3/2/2012 Fill	HA-202 S1 L1203630-01 0-0.5 3/2/2012 Fill	HA-202 S2 L1203630-02 1-2 3/2/2012 Fill	HA-202 S3 L1203630-03 2-3 3/2/2012 Fill
Metals (mg/kg)																		
Antimony	20	-	1.6	-	-	-	-	-	ND (0.45)	-	-	-	-	-	-	-	-	-
Arsenic	20	-	8.5	-	-	-	-	-	5	-	-	-	-	-	-	-	-	-
Barium	1000	-	91.3	-	-	-	-	-	29.8	-	-	-	-	-	-	-	-	-
Beryllium	100	-	0.45	-	-	-	-	-	0.46	-	-	-	-	-	-	-	-	-
Cadmium	2	-	3.3	-	-	-	-	-	ND (0.18)	-	-	-	-	-	-	-	-	-
Chromium	30	-	18.8	-	-	-	-	-	18.5	-	-	-	-	-	-	-	-	-
Lead	300	-	296	-	-	-	-	-	40.4	-	-	-	-	-	-	-	-	-
Mercury	20	-	1	-	-	-	-	-	0.52	-	-	-	-	-	-	-	-	-
Nickel	20	-	21.6	-	-	-	-	-	11.3	-	-	-	-	-	-	-	-	-
Selenium	400	-	1.1	-	-	-	-	-	ND (0.45)	-	-	-	-	-	-	-	-	-
Silver	100	-	ND (0.225)	-	-	-	-	-	ND (0.225)	-	-	-	-	-	-	-	-	-
Vanadium	600	-	29.2	-	-	-	-	-	23.6	-	-	-	-	-	-	-	-	-
Zinc	2500	-	645	-	-	-	-	-	46	-	-	-	-	-	-	-	-	-
TCLP Metals (mg/L)																		
Lead	NA	-	0.28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Polychlorinated Biphenyls (PCBs) (µg/kg)																		
Aroclor 1248	2000	ND (60)	-	ND (55)	ND (60)	ND (65)	ND (65)	ND (65)	-	ND (65)	ND (80)	ND (19)	ND (18.8)	ND (19.7)	ND (21.2)	158	233	ND (20.5)
Aroclor 1254	2000	33700	-	ND (55)	ND (60)	396	ND (65)	643	-	ND (65)	ND (80)	121	238	118	ND (21.2)	190	319	ND (20.5)
Aroclor 1260	2000	13100 a	-	ND (55)	ND (60)	285 a	ND (65)	246 a	-	ND (65)	ND (80)	104	161	103	ND (21.2)	125	177	ND (20.5)
Waste Characteristics																		
Corrosivity as pH	NA	-	7.2	-	-	-	-	-	8.1	-	-	-	-	-	-	-	-	-
Cyanide Reactivity (mg/kg)	NA	-	<1.8	-	-	-	-	-	<1.9	-	-	-	-	-	-	-	-	-
Ignitability (Flashpoint) (deg F)	NA	-	>230	-	-	-	-	-	>230	-	-	-	-	-	-	-	-	-
Redox Potential Vs H2	NA	-	391 b	-	-	-	-	-	361 b	-	-	-	-	-	-	-	-	-
Solids, Percent	NA	80.9	83.5	86.7	81	73.5	73.8	76.8	79.5	76.8	60.6	84	86	84	78	94	85	78
Sulfide Reactivity (mg/kg)	NA	-	<60	-	-	-	-	-	<63	-	-	-	-	-	-	-	-	-

Notes and Abbreviations:

^a Elevated RL due to dilution required for matrix interference.

^b Analysis requested after recommended holding time.

Only compounds detected on the dates indicated are included in this table.

ND (110): Compound not detected; value in parentheses is one half the laboratory reporting limit.

< : Compound not detected; value is the laboratory reporting limit.

- : Analysis not conducted.

Bold values indicate an exceedance of the MassDEP Reportable Concentration in Soil (RCS-1).

VOCs: Volatile Organic Compounds by SW846 8260B

SVOCs: Semi-volatile Organic Compounds by SW846 8270C

VPH: Volatile Petroleum Hydrocarbons by MADEP VPH REV 1.1

EPH: Extractable Petroleum Hydrocarbons by MADEP EPH REV 1

^a Estimated value due to the presence of other Aroclor pattern.

PCBs analyzed by SW846 EPA Method 8082

TABLE II
SUMMARY OF SOIL QUALITY DATA
FORMER ENERGY INTERNATIONAL PARCEL
BOSTON, MASSACHUSETTS
FILE NO. 06318-502

Client Sample ID: Lab Sample ID: Sample Depth (ft): Date Sampled: Matrix:	MassDEP Reportable Concentration	HA-203 S1 L1203630-06	HA-203 S2 L1203630-07	HA-203 S3 L1203630-08	HA-204 S1 L1203632-01	HA-204 S2 L1203632-02	HA-204 S3 L1203632-03	HA-205 S1 L1203632-06	HA-205 S2 L1203632-07	HA-205 S3 L1203632-08	HA-206 S1 L1203636-01	HA-206 S2 L1203636-02	HA-206 S3 L1203636-03	HA-207 S1 L1203636-06	HA-207 S2 L1203636-07	HA-207 S3 L1203636-08	HA-208 S1 L1203638-01	HA-208 S2 L1203638-02	HA-208 S3 L1203638-03
	(RCS-1)	0-0.5 3/2/2012 Fill	1-2 3/2/2012 Fill	2-3 3/2/2012 Fill	0-0.5 3/2/2012 Fill	1-2 3/2/2012 Fill	2-3 3/2/2012 Fill	0-0.5 3/2/2012 Fill	1-2 3/2/2012 Fill	2-3 3/2/2012 Fill	0-0.5 3/2/2012 Fill	1-2 3/2/2012 Fill	2-3 3/2/2012 Fill	0-0.5 3/2/2012 Fill	1-2 3/2/2012 Fill	2-3 3/2/2012 Fill	0-0.5 3/2/2012 Fill	1-2 3/2/2012 Fill	2-3 3/2/2012 Fill
VOCs (µg/kg)																			
Benzene	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene	4000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	30000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,4-Trimethylbenzene	1000000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Xylene (total)	300000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SVOCs (µg/kg)																			
Benzoic acid	1000000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3&4-Methylphenol	500000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acenaphthene	4000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acenaphthylene	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Anthracene	1000000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(a)anthracene	7000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(a)pyrene	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	7000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	1000000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	70000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chrysene	70000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibenzo(a,h)anthracene	700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibenzofuran	100000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
bis(2-Ethylhexyl)phthalate	200000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fluoranthene	1000000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fluorene	1000000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	7000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Methylnaphthalene	700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene	4000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenanthrene	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyrene	1000000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VPH (µg/kg)																			
C9-C10 Aromatics	100000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C5-C8 Aliphatics	100000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C9-C12 Aliphatics	1000000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EPH (µg/kg)																			
C9-C18 Aliphatics	1000000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C19-C36 Aliphatics	3000000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C11-C22 Aromatics	1000000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE II
SUMMARY OF SOIL QUALITY DATA
FORMER ENERGY INTERNATIONAL PARCEL
BOSTON, MASSACHUSETTS
FILE NO. 06318-502

Client Sample ID: Lab Sample ID: Sample Depth (ft): Date Sampled: Matrix:	MassDEP Reportable Concentration	HA-203 S1 L1203630-06	HA-203 S2 L1203630-07	HA-203 S3 L1203630-08	HA-204 S1 L1203632-01	HA-204 S2 L1203632-02	HA-204 S3 L1203632-03	HA-205 S1 L1203632-06	HA-205 S2 L1203632-07	HA-205 S3 L1203632-08	HA-206 S1 L1203636-01	HA-206 S2 L1203636-02	HA-206 S3 L1203636-03	HA-207 S1 L1203636-06	HA-207 S2 L1203636-07	HA-207 S3 L1203636-08	HA-208 S1 L1203638-01	HA-208 S2 L1203638-02	HA-208 S3 L1203638-03
	(RCS-1)	0-0.5 3/2/2012 Fill	1-2 3/2/2012 Fill	2-3 3/2/2012 Fill	0-0.5 3/2/2012 Fill	1-2 3/2/2012 Fill	2-3 3/2/2012 Fill	0-0.5 3/2/2012 Fill	1-2 3/2/2012 Fill	2-3 3/2/2012 Fill	0-0.5 3/2/2012 Fill	1-2 3/2/2012 Fill	2-3 3/2/2012 Fill	0-0.5 3/2/2012 Fill	1-2 3/2/2012 Fill	2-3 3/2/2012 Fill	0-0.5 3/2/2012 Fill	1-2 3/2/2012 Fill	2-3 3/2/2012 Fill
Metals (mg/kg)																			
Antimony	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arsenic	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barium	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Beryllium	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cadmium	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chromium	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lead	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mercury	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nickel	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Selenium	400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Silver	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vanadium	600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Zinc	2500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TCLP Metals (mg/L)																			
Lead	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Polychlorinated Biphenyls (PCBs) (µg/kg)																			
Aroclor 1248	2000	155	73.5	ND (18.35)	ND (18.45)	ND (37.55)	ND (21)	4600	ND (18)	ND (18.9)	ND (38.6)	ND (19.35)	ND (18.5)	797	ND (21.1)	ND (21.8)	14000	ND (19.9)	ND (26.95)
Aroclor 1254	2000	150	102	ND (18.35)	67	ND (37.55)	ND (21)	9840	80	ND (18.9)	1030	ND (19.35)	ND (18.5)	1740	ND (21.1)	ND (21.8)	18900	ND (19.9)	ND (26.95)
Aroclor 1260	2000	101	96.1	ND (18.35)	117	ND (37.55)	ND (21)	2110	ND (18)	ND (18.9)	865	ND (19.35)	ND (18.5)	571	ND (21.1)	ND (21.8)	5600	ND (19.9)	ND (26.95)
Waste Characteristics																			
Corrosivity as pH	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cyanide Reactivity (mg/kg)	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ignitability (Flashpoint) (deg F)	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Redox Potential Vs H2	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Solids, Percent	NA	84	90	87	90	87	78	92	90	87	84	83	87	96	77	75	87	83	60
Sulfide Reactivity (mg/kg)	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes and Abbreviations:

^a Elevated RL due to dilution required for matrix interference.

^b Analysis requested after recommended holding time.

Only compounds detected on the dates indicated are included in this table.

ND (110): Compound not detected; value in parentheses is one half the laboratory reporting limit.

< : Compound not detected; value is the laboratory reporting limit.

- : Analysis not conducted.

Bold values indicate an exceedance of the MassDEP Reportable Concentration in Soil (RCS-1).

VOCs: Volatile Organic Compounds by SW846 8260B

SVOCs: Semi-volatile Organic Compounds by SW846 8270C

VPH: Volatile Petroleum Hydrocarbons by MADEP VPH REV 1.1

EPH: Extractable Petroleum Hydrocarbons by MADEP EPH REV 1

^a Estimated value due to the presence of other Aroclor pattern.

PCBs analyzed by SW846 EPA Method 8082

TABLE III
SUMMARY OF GROUNDWATER QUALITY DATA
FORMER ENERGY INTERNATIONAL PARCEL
BOSTON, MASSACHUSETTS
FILE NO. 06318-502

Client Sample ID Lab Sample ID Date Sampled Depth to Water Matrix	MassDEP Reportable Concentration (RCGW-2)	HA103(OW) L1100274-01 1/6/2011 13.7 Groundwater
VOCs (mg/L) Methyl tert butyl ether	5	0.015
EPH (mg/L) C9-C18 Aliphatics C19-C36 Aliphatics C11-C22 Aromatics	5 50 5	ND(0.0515) ND(0.0515) ND(0.0515)
PCBs (mg/L) Total PCBs		ND
Metals (mg/L) Antimony, Dissolved Arsenic, Dissolved Barium, Dissolved Beryllium, Dissolved Cadmium, Dissolved Chromium, Dissolved Lead, Dissolved Mercury, Dissolved Nickel, Dissolved Selenium, Dissolved Silver, Dissolved Thallium, Dissolved Vanadium, Dissolved Zinc, Dissolved	8 0.9 50 0.2 0.004 0.3 0.01 0.02 0.2 0.1 0.007 3 4 0.9	0.002 ND(0.0025) 0.293 ND(0.002) ND(0.002) ND(0.005) ND(0.005) ND(0.0001) ND(0.0125) ND(0.005) ND(0.0035) ND(0.001) ND(0.005) ND(0.025)

Notes and Abbreviations:

ND: Not detected

ND(0.0515): Not detected; number in parentheses
is one-half the laboratory detection limit

VOCs: Volatile Organic Compounds by EPA Method 8260

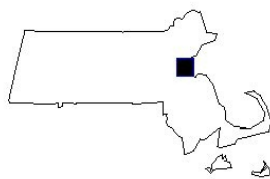
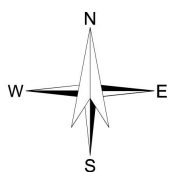
EPH: Extractable Petroleum Hydrocarbons by MassDEP EPH Method

PCBs: Polychlorinated Biphenyls by EPA Method 8082

FIGURES



SITE COORDINATES: 42°20'36"N 71°35'W



U.S.G.S. QUADRANGLE: BOSTON SOUTH, MA

HALEY & ALDRICH

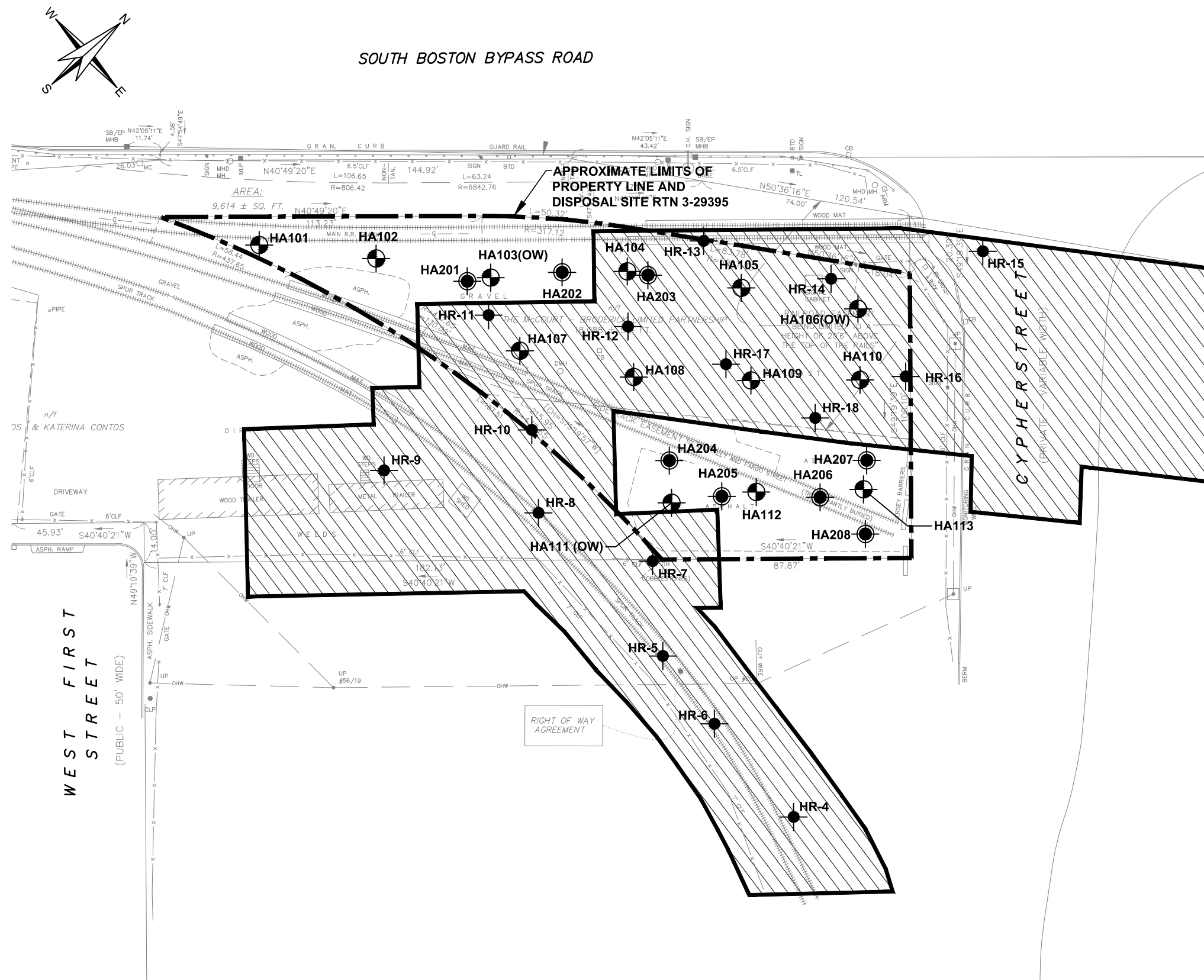
FORMER ENERGY INTERNATIONAL PARCEL
B STREET AND CYPHER STREET
BOSTON, MASSACHUSETTS

PROJECT LOCUS

SCALE: 1:24,000
OCTOBER 2012

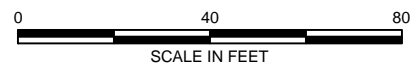
FIGURE 1

J:\GRAPHICS\06318\06318-530-B046.DWG



- LEGEND:**
- HA201** DESIGNATION AND APPROXIMATE LOCATION OF TEST BORING CONDUCTED BY NEW HAMPSHIRE BORING OF DERRY, NEW HAMPSHIRE ON 2 MARCH 2012 AND MONITORED BY HALEY & ALDRICH PERSONNEL.
- HA101** DESIGNATION AND APPROXIMATE LOCATION OF TEST BORING CONDUCTED BY GEOLOGIC EARTH EXPLORATION, INC. OF NORFOLK, MASSACHUSETTS ON 29 NOVEMBER TO 2 DECEMBER 2010 AND MONITORED BY HALEY & ALDRICH PERSONNEL. "(OW)" INDICATES GROUNDWATER MONITORING WELL INSTALLED.
- HR-12** DESIGNATION AND APPROXIMATE LOCATION OF CONFIRMATORY POST-EXCAVATION SOIL SAMPLE COLLECTED BY CAMP DRESSER AND MCKEE (CDM) DURING MARCH/APRIL 1992
- AREA OF SOIL REMOVAL AND REMEDIATION PERFORMED IN 1992 IN PREPARATION FOR THE CONSTRUCTION OF THE SOUTH BOSTON HAUL ROAD FOR THE CENTRAL ARTERY/TUNNEL PROJECT.
- APPROXIMATE LIMITS OF PROPERTY LINE AND DISPOSAL SITE RTN 3-29395

- NOTE:**
1. BASE PLAN TAKEN FROM AN ELECTRONIC FILE TITLED "495-03m_transmittal.dwg", PREPARED BY DIGITAL GEOGRAPHIC TECHNOLOGIES, INC. RECEIVED BY HALEY & ALDRICH, INC. ON 28 AUGUST 2012.
- REFERENCE:**
1. CAMP, DRESSER & MCKEE, INC., "SUMMARY DOCUMENTATION REPORT FOR CLOSE-OUT OF PCB REMEDIATION SITE, SOUTH BOSTON HAUL ROAD, CENTRAL ARTERY/TUNNEL PROJECT," JUNE 1992.



HALEY & ALDRICH FORMER ENERGY INTERNATIONAL PARCEL
B STREET AND CYPHER STREET
BOSTON, MASSACHUSETTS

**SITE AND SUBSURFACE
EXPLORATION LOCATION PLAN**



LEGEND:

HA201 DESIGNATION AND APPROXIMATE LOCATION OF TEST BORING CONDUCTED BY NEW HAMPSHIRE BORING OF DERRY, NEW HAMPSHIRE ON 2 MARCH 2012 AND MONITORED BY HALEY & ALDRICH PERSONNEL.

DATA BOX - CONCENTRATION OF POLYCHLORINATED BIPHENYLS (PCBS) IN SOIL (MG/KG) (SUM OF DETECTED VALUES)

0.40	0-0.5' DEPTH
0.22	1-2' DEPTH
ND	2-3' DEPTH

"ND" INDICATES NOT DETECTED

HA101 DESIGNATION AND APPROXIMATE LOCATION OF TEST BORING CONDUCTED BY GEOLOGIC EARTH EXPLORATION, INC. OF NORFOLK, MASSACHUSETTS ON 29 NOVEMBER TO 2 DECEMBER 2010 AND MONITORED BY HALEY & ALDRICH PERSONNEL. "(OW)" INDICATES GROUNDWATER MONITORING WELL INSTALLED.

DATA BOX - CONCENTRATION OF POLYCHLORINATED BIPHENYLS (PCBS) IN SOIL (MG/KG) (SUM OF DETECTED VALUES)

0.486	0-2' DEPTH
0.35	2-4' DEPTH
ND	4-6' DEPTH
-	6-8' DEPTH
-	8-10' DEPTH
-	10-12' DEPTH

"ND" INDICATES NOT DETECTED
"-" INDICATES ANALYSIS NOT CONDUCTED

HR-12 DESIGNATION AND APPROXIMATE LOCATION OF CONFIRMATORY POST-EXCAVATION SOIL SAMPLE COLLECTED BY CAMP DRESSER AND MCKEE (CDM) DURING MARCH/APRIL 1992

DATA BOX - CONCENTRATION OF POLYCHLORINATED BIPHENYLS (PCBS) IN SOIL (MG/KG) (SUM OF DETECTED VALUES)

ND - 2 FT CONCENTRATION/ DEPTH
"ND" INDICATES NOT DETECTED

LABORATORY DETECTION LIMITS WERE NOT PROVIDED BY CDM DURING 1992 SAMPLING BUT WERE TYPICALLY REPORTED AS 0.13 MG/KG OR LOWER ON OTHER SAMPLES

AREA OF SOIL REMOVAL AND REMEDIATION PERFORMED IN 1992 IN PREPARATION FOR THE CONSTRUCTION OF THE SOUTH BOSTON HAUL ROAD FOR THE CENTRAL ARTERY/TUNNEL PROJECT.

APPROXIMATE LIMITS OF PROPERTY LINE AND DISPOSAL SITE RTN 3-29395

- NOTES:
1. SCALED BACKGROUND IMAGE, DATED 19 JUNE 2010, TAKEN ELECTRONICALLY FROM GOOGLE EARTH PRO.
 2. LIMITS OF PROPERTY LINE TAKEN FROM AN ELECTRONIC FILE TITLED "495-03m_transmittal.dwg", PREPARED BY DIGITAL GEOGRAPHIC TECHNOLOGIES, INC. RECEIVED BY HALEY & ALDRICH, INC. ON 28 AUGUST 2012.

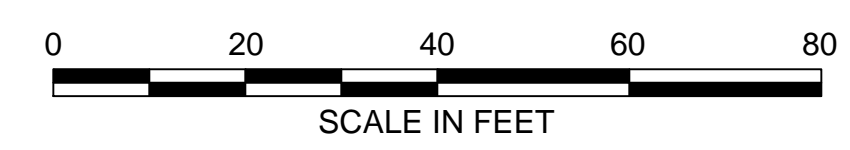
- REFERENCE:
1. CAMP, DRESSER & MCKEE, INC., "SUMMARY DOCUMENTATION REPORT FOR CLOSE-OUT OF PCB REMEDIATION SITE, SOUTH BOSTON HAUL ROAD, CENTRAL ARTERY/TUNNEL PROJECT," JUNE 1992.

HALEY & ALDRICH FORMER ENERGY INTERNATIONAL PARCEL
B STREET AND CYPHER STREET
BOSTON, MASSACHUSETTS

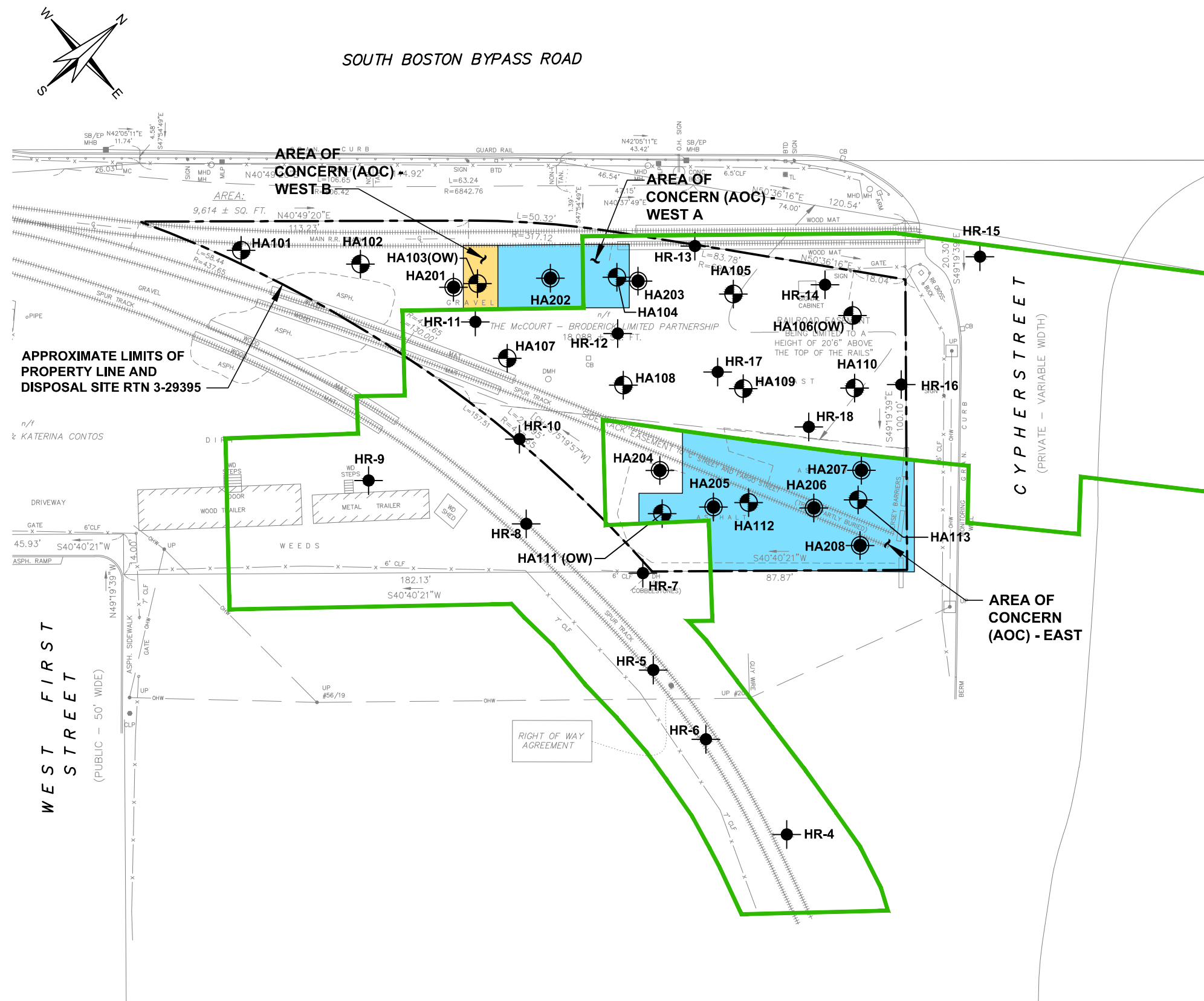
TOTAL PCB CONCENTRATIONS
IN SOIL

SCALE: AS SHOWN
OCTOBER 2012

FIGURE 3



J:\GRAPHICS\06318\06318-530-B048.DWG



- LEGEND:**
- HA201** DESIGNATION AND APPROXIMATE LOCATION OF TEST BORING CONDUCTED BY NEW HAMPSHIRE BORING OF DERRY, NEW HAMPSHIRE ON 2 MARCH 2012 AND MONITORED BY HALEY & ALDRICH PERSONNEL.
 - HA101** DESIGNATION AND APPROXIMATE LOCATION OF TEST BORING CONDUCTED BY GEOLOGIC EARTH EXPLORATION, INC. OF NORFOLK, MASSACHUSETTS ON 29 NOVEMBER TO 2 DECEMBER 2010 AND MONITORED BY HALEY & ALDRICH PERSONNEL. "(OW)" INDICATES GROUNDWATER MONITORING WELL INSTALLED.
 - HR-12** DESIGNATION AND APPROXIMATE LOCATION OF CONFIRMATORY POST-EXCAVATION SOIL SAMPLE COLLECTED BY CAMP DRESSER AND MCKEE (CDM) DURING MARCH/APRIL 1992
 - AREA OF SOIL REMOVAL AND REMEDIATION PERFORMED IN 1992 IN PREPARATION FOR THE CONSTRUCTION OF THE SOUTH BOSTON HAUL ROAD FOR THE CENTRAL ARTERY/TUNNEL PROJECT.**
 - 2 FEET DEPTH OF REMEDIAL EXCAVATION**
 - 4 FEET DEPTH OF REMEDIAL EXCAVATION**
 - APPROXIMATE LIMITS OF PROPERTY LINE AND DISPOSAL SITE RTN 3-29395**

- NOTE:**
1. BASE PLAN TAKEN FROM AN ELECTRONIC FILE TITLED "495-03m_transmittal.dwg", PREPARED BY DIGITAL GEOGRAPHIC TECHNOLOGIES, INC. RECEIVED BY HALEY & ALDRICH, INC. ON 28 AUGUST 2012.
- REFERENCE:**
1. CAMP, DRESSER & MCKEE, INC., "SUMMARY DOCUMENTATION REPORT FOR CLOSE-OUT OF PCB REMEDIATION SITE, SOUTH BOSTON HAUL ROAD, CENTRAL ARTERY/TUNNEL PROJECT," JUNE 1992.

0 40 80
SCALE IN FEET

HALEY & ALDRICH FORMER ENERGY INTERNATIONAL PARCEL
B STREET AND CYPHER STREET
BOSTON, MASSACHUSETTS

PCB REMEDIATION EXCAVATION PLAN

SCALE: AS SHOWN
OCTOBER 2012

FIGURE 4



APPENDIX A

Correspondence

(Copies of Owner Certification)

Haley & Aldrich, Inc.
465 Medford St.
Suite 2200
Boston, MA 02129

Tel: 617.886.7400
Fax: 617.886.7600
HaleyAldrich.com



26 October 2012
File No. 06318-530

The McCourt-Broderick Limited Partnership
c/o The McCourt Company, Inc.
9420 Wilshire Boulevard, Suite 300
Beverly Hills, CA 90212

Subject: Subject: Owner Certification
Self-Implementing Plan
Former Energy International, Inc.
Boston Tax Assessor Parcel Number 06-2771-100
Cypher Street
South Boston, Massachusetts
Release Tracking Number (RTN) 3-29395

Dear Mr. Regolino:

In connection with the Self-Implementing Plan for the above referenced property, Haley & Aldrich, Inc. (Haley & Aldrich) will maintain all sampling plans, sample collection procedures, sample preparation procedures, extraction procedures, and instrumental/chemical analysis procedures used to assess or characterize PCB contamination within the TSCA regulated areas. The information is on file at the offices of Haley & Aldrich, 465 Medford Street, Suite 2200, Boston, MA 02145 and is available for EPA inspection upon request.

Sincerely yours,
HALEY & ALDRICH, INC.

A handwritten signature in blue ink, appearing to read "Cole E. Worthy III". The signature is fluid and cursive, with a large, stylized "C" at the beginning.

Cole E. Worthy III, LSP
Vice President

Owner's Certification – 40 CFR 761.61(a)(3)(i)(E)

Self-Implementing Cleanup and Disposal Plan
Former Energy International, Inc.
Boston Tax Assessor Parcel Number 06-2771-100
Cypher Street
South Boston, Massachusetts
Release Tracking Number (RTN) 3-29395

The parties below certify that all sampling plans, sample collection procedures, sample preparation procedures, extraction procedures, and instrumental/chemical analysis procedures used to assess or characterize the PCB contamination within the TSCA regulated areas at the Former Energy International, Inc. Site are on file at the offices of Haley & Aldrich, Inc., 465 Medford Street, Suite 2200, Boston, MA 02145, and are available for EPA inspection upon request.

The McCourt-Broderick Limited Partnership c/o The McCourt Company, Inc.
(Owner and Party Potentially Conducting Cleanup):

Austin P. Regolino
Name, as (TITLE) and not individually
AUSTIN P. REGOLINO

OCT. 26, 2012
Date

EXEC. VICE PRES.
Title

APPENDIX B

Boring Logs

GEOPROBE REPORT

Boring No. HA101

Project FORMER ENERGY INTERNATIONAL PARCEL, BOSTON, MA
 Client THE MCCOURT-BRODERICK LIMITED PARTNERSHIP
 Contractor GEOLOGIC-EARTH EXPLORATION, INC.

File No. 06318-502
 Sheet No. 1 of 1
 Start December 2, 2010
 Finish December 2, 2010
 Driller D. Jacobs

H&A Rep. M. Dodson

Elevation
 Datum Boston City Base

Location As planned-center
 of grid


				Casing	Sampler	Barrel	Drilling Equipment and Procedures		Finish								
Type				--	G	--	Rig Make & Model: Geoprobe		Driller D. Jacobs								
Inside Diameter (in.)				--	2.0	--	Bit Type:		H&A Rep. M. Dodson								
Hammer Weight (lb)				--	--	-	Drill Mud: None		Elevation								
Hammer Fall (in.)				--	--	-	Casing: None		Datum Boston City Base								
							Hoist/Hammer: Automatic Hammer --		Location As planned-center of grid								
							PID Make & Model: --										
Depth (ft)	Sampler Blows per 6 in.	Sample No. & Rec. (in.)	Sample Depth (ft)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size [†] , structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel		Sand			Field Test					
							% Coarse	% Fine	% Coarse	% Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	Strength	
0	PUSH	G1 42	0.0 4.0	8.0	SP/ SW	Note: Began boring (0.0 ft) below approximately 1.0 ft of coarse gravel railroad ballast. PID = 0.0/0.0 ppm	5	15	15	20	40	5					
		Gray to brown well graded to poorly graded SAND with gravel (SP/SW), mps 1.3 in., no structure, no odor, dry to moist, approximately 15% cinders and ash PID = 0.0/0.0 ppm															
5	PUSH	G2 22	4.0 8.0			Note: Below 2.0 ft approximately 30% cinders, ash, and black coal-like specks, 20% brick and concrete fragments. -FILL- PID = 0.0/0.0 ppm											
		Note: 6.0 to 6.8 ft black silty SAND (SM), moist. PID = 11.5/0.0 ppm															
10	PUSH	G3	8.0 12.0	12.0	SP/ ML	Olive gray to black (layered) poorly graded SAND (SP) interbedded with dark gray/black sandy SILT (ML), trace fabric, brick specks, slight petroleum-like odor from black layers, strong hydrogen sulfide odor from sandy layers, 10% peat and wood fragments throughout PID = 0.5/0.0 ppm -FILL- PID = 0.3/0.0 ppm				10 5	85 25	5 70	R N	L L			
15	PUSH	G4	12.0 16.0	16.0	OL/ OH	Dark gray brown ORGANIC SOIL with sand (OL-OH), mps 1.0 in. (wood), disturbed slight hydrogen sulfide and petroleum-like odor, wet, trace brick and concrete specks and fragments, 5% wood and peat fibers, trace ash, cinders and coal-like material, shell specks and fragments PID = 0.0/0.0 ppm -COHESIVE FILL- PID = 0.0/0.0 ppm		5		5	10	80	N	L	L		
20	PUSH	G5	16.0 20.0	19.5 20.0	SP- SM	Dark gray brown poorly graded SAND with silt (SP-SM), mps 0.5 in., no structure, no odor, wet, trace brick and concrete specks, shell specs PID = 0.0/0.0 ppm -FILL- PID = 0.0/0.0 ppm				10	25	55	10				
					CL	"Hard" (to touch) olive gray to yellow lean CLAY (CL), mps 1 mm, laminated, no odor, wet -MARINE DEPOSITS- BOTTOM OF EXPLORATION 20.0 FT					10	90	N	L	L		

Water Level Data

Sample ID

Well Diagram

Summary

Date	Time	Elapsed Time (hr.)	Depth (ft) to:			O - Open End Rod T - Thin Wall Tube U - Undisturbed Sample S - Splitspoon Sample G - Geoprobe		Overburden (ft)		Rock Cored (ft)		Samples		G5	
			Bottom of Casing	Bottom of Hole	Water			20.0							

Boring No. HA101

Field Tests:

Dilatancy: R - Rapid S - Slow N - None

Plasticity: N - Nonplastic L - Low M - Medium H - High

Toughness: L - Low M - Medium H - High

Dry Strength: N - None L - Low M - Medium H - High V - Very High

[†]Note: Maximum particle size (mps) is determined by direct observation within the limitations of sampler size.

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

GEOPROBE REPORT

Boring No. HA102

Project FORMER ENERGY INTERNATIONAL PARCEL, BOSTON, MA
 Client THE MCCOURT-BRODERICK LIMITED PARTNERSHIP
 Contractor GEOLOGIC-EARTH EXPLORATION, INC.








File No. 06318-502
 Sheet No. 1 of 1
 Start December 2, 2010
 Finish December 2, 2010
 Driller D. Jacobs

H&A Rep. M. Dodson

Elevation
 Datum Boston City Base

Location As planned-center
 of grid

				Casing	Sampler	Barrel	Drilling Equipment and Procedures		Finish	December 2, 2010									
Type				--	G	--	Rig Make & Model: Geoprobe		Driller	D. Jacobs									
Inside Diameter (in.)				--	2.0	--	Bit Type:		H&A Rep.	M. Dodson									
Hammer Weight (lb)				--	--	-	Drill Mud: None		Elevation										
Hammer Fall (in.)				--	--	-	Casing: None		Datum Boston City Base										
							Hoist/Hammer: Automatic Hammer --		Location As planned-center of grid										
							PID Make & Model: --												
Depth (ft)	Sampler Blows per 6 in.	Sample No. & Rec. (in.)	Sample Depth (ft)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size [†] , structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)					Gravel		Sand		Field Test				
											% Coarse	% Fine	% Coarse	% Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity
0	PUSH	G1 39	0.0 4.0	2.2	GP	Light gray poorly graded GRAVEL with sand (GP), mps 1.5 in., no structure, moderate degraded fuel/petroleum-like odor, moist to dry PID = 102.0/0.0 ppm													
SM					-FILL- PID = 125.0/0.0 ppm														
5	PUSH	G2 30	4.0 8.0	12.0	SM	Dark gray brown silty SAND with gravel (SM), mps 1.0 in, no structure, strong fuel/petroleum-like odor, moist, trace sheen Note: 4.0 to 6.0 ft wet with sheen. Approximately 35% cinders, ash and coal-like specks. Probable perched water? PID = 60.8/0.0 ppm													
					SM	Dark gray black 50% CINDERS, ASH, CLINKERS and COAL-LIKE SPECKS, 40% silty SAND, 10% BRICK FRAGMENTS and SPECKS, moderate degraded fuel/petroleum-like odor, moist PID = 28.0/0.0 ppm													
10	PUSH	G3 27	8.0 12.0	12.0		8.0 to 12.0 ft - Similar to above except faint odor PID = 8.0/0.0 ppm													
						-FILL- PID = 2.3/0.0 ppm													
15	PUSH	G4 33	12.0 16.0	16.0	OL-OH	Gray (top 3.0 in.) to olive ORGANIC SOIL (OL-OH), mps 1 mm, no structure, degraded fuel/petroleum-like odor at top of recovery. Hydrogen sulfide odor at bottom PID = 2.3/0.0 ppm													
						-ORGANIC DEPOSITS- PID = 0.0/0.0 ppm													
						BOTTOM OF EXPLORATION 16.0 FT													

Water Level Data						Sample ID	Well Diagram	Summary	
Date	Time	Elapsed Time (hr.)	Depth (ft) to:			O - Open End Rod T - Thin Wall Tube U - Undisturbed Sample S - Splitspoon Sample G - Geoprobe	 Riser Pipe  Screen  Filter Sand  Cuttings  Grout  Concrete  Bentonite Seal	Overburden (ft)	16.0
			Bottom of Casing	Bottom of Hole	Water			Rock Cored (ft)	Samples
								Boring No.	HA102
Field Tests:		Dilatancy: R - Rapid S - Slow N - None Toughness: L - Low M - Medium H - High				Plasticity: N - Nonplastic L - Low M - Medium H - High Dry Strength: N - None L - Low M - Medium H - High V - Very High			
†Note: Maximum particle size (mps) is determined by direct observation within the limitations of sampler size.									
Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.									

GEOPROBE REPORT

Boring No. HA103 (OW)

Project FORMER ENERGY INTERNATIONAL PARCEL, BOSTON, MA
 Client THE MCCOURT-BRODERICK LIMITED PARTNERSHIP
 Contractor GEOLOGIC-EARTH EXPLORATION, INC.

File No. 06318-502
 Sheet No. 1 of 2
 Start December 1, 2010
 Finish December 1, 2010
 Driller D. Jacobs

H&A Rep. M. Dodson

Elevation 14.1
 Datum Boston City Base

Location As planned-center
 of grid

				Casing	Sampler	Barrel	Drilling Equipment and Procedures		Finish Driller D. Jacobs H&A Rep. M. Dodson								
Type				--	G	--	Rig Make & Model: Geoprobe Bit Type:		Elevation 14.1 Datum Boston City Base								
Inside Diameter (in.)				--	2.0	--	Drill Mud: None										
Hammer Weight (lb)				--	--	-	Casing: None		Location As planned-center of grid								
Hammer Fall (in.)				--	-	-	Hoist/Hammer: Automatic Hammer -- PID Make & Model: --										
Depth (ft)	Sampler Blows per 6 in.	Sample No. & Rec. (in.)	Sample Depth (ft)	Well Diagram	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size [†] , structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel		Sand		Field Test					
								% Coarse	% Fine	% Coarse	% Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	Strength
0	PUSH	G1 40	0.0 4.0		11.9 2.2	SM	Brown silty SAND with gravel (SM), mps 0.9 in., no structure, no odor, moist PID = 1.5/0.0 ppm -FILL-										
GP SM		Gray poorly graded GRAVEL with sand (GP), mps 1.4 in., no structure, no odor, dry PID = 8.5/0.0 ppm Dark gray silty SAND (SM), mps 0.5 in., no structure, no door, moist, 20% cinders and clinkers, trace coal-like material	45			30	15	5	5	15							
	PUSH	G2 37	4.0 8.0				-FILL- PID = 6.3/0.0 ppm										
5																	
	PUSH	G3 42	8.0 12.0				Note: Slight petrochemical-like odor from 8.0 to 11.8 ft. PID = 12.7/0.0 ppm										
10							PID = 25.3/0.0 ppm										

Water Level Data

Sample ID

Well Diagram

Summary

Date	Time	Elapsed Time (hr.)	Depth (ft) to:			O - Open End Rod T - Thin Wall Tube U - Undisturbed Sample S - Splitspoon Sample G - Geoprobe		Overburden (ft) 20.0 Rock Cored (ft) Samples G5 Boring No. HA103 (OW)
			Bottom of Casing	Bottom of Hole	Water			

Field Tests:

Dilatancy: R - Rapid S - Slow N - None

Plasticity: N - Nonplastic L - Low M - Medium H - High

Toughness: L - Low M - Medium H - High

Dry Strength: N - None L - Low M - Medium H - High V - Very High

[†]Note: Maximum particle size (mps) is determined by direct observation within the limitations of sampler size.

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

GEOPROBE REPORT

Boring No. HA103 (OW)

File No. 06318-502

Sheet No. 2 of 2

Depth (ft)	Sampler Blows per 6 in.	Sample No. & Rec. (in.)	Sample Depth (ft)	Well Diagram	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size†, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel		Sand			Field Test				
								% Coarse	% Fine	% Coarse	% Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	Strength
15					2.3 11.8		-FILL-										
	P U S H	G4 39	12.0 16.0			GP- GM GP- GM	Light red yellow poorly graded GRAVEL with silt and sand (GP-GM), mps 1.0 in., no structure, no odor, wet Light red yellow poorly graded GRAVEL with silt and sand (GP-GM), mps 1.0 in., no structure, no odor, wet -FILL- PID = 10.6/0.0 ppm	10	60	10	5	5	10				
					0.8 13.3 0.6 13.5	SP- SM OL/ OH	2-in. layer of SAND, CINDERS, ASH, possible sheen, moderate petrochemical-like odor -FILL- Dark gray (probably stained) ORGANIC SOIL (OL/ OH), mps 1 mm, no structure, moderate petrochemical-like odor, wet, trace shell specks and peat fibers PID = 4.0/0.0 ppm			5	20	65 10	10 90	N	L	L	
				-0.9 15.0	OL/ OH	Similar to above except olive (no staining), moderate hydrogen sulfide odor -ORGANIC DEPOSITS- PID = 0.0/0.0 ppm PID = 0.0/0.0 ppm											
20					-5.9 20.0		BOTTOM OF EXPLORATION 20.0 FT Note: Installed 2-in. observation well in completed borehole to 16.0 ft.										

NOTE: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Boring No. HA103 (OW)

GEOPROBE REPORT

Boring No. HA104

Project FORMER ENERGY INTERNATIONAL PARCEL, BOSTON, MA
 Client THE MCCOURT-BRODERICK LIMITED PARTNERSHIP
 Contractor GEOLOGIC-EARTH EXPLORATION, INC.


File No. 06318-502
 Sheet No. 1 of 1
 Start December 1, 2010
 Finish December 1, 2010
 Driller D. Jacobs

H&A Rep. M. Dodson

Elevation
 Datum Boston City Base

Location As planned-center
 of grid

				Casing	Sampler	Barrel	Drilling Equipment and Procedures			Finish December 1, 2010 Driller D. Jacobs H&A Rep. M. Dodson									
Type				--	G	--	Rig Make & Model: Geoprobe Bit Type:			Elevation									
Inside Diameter (in.)				--	2.0	--	Drill Mud: None			Datum Boston City Base									
Hammer Weight (lb)				--	--	-	Casing: None			Location As planned-center									
Hammer Fall (in.)				--	--	-	Hoist/Hammer: Automatic Hammer -- PID Make & Model: --			of grid									
Depth (ft)	Sampler Blows per 6 in.	Sample No. & Rec. (in.)	Sample Depth (ft)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size [†] , structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)					Gravel		Sand		Field Test				
											% Coarse	% Fine	% Coarse	% Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity
0	P U S H	G1 34	0.0 4.0	4.7	GW	Light gray brown well graded GRAVEL with sand (GW), mps 1.0 in., no structure, no dor, dry PID = 0.0/0.0 ppm -FILL- PID = 0.0/0.0 ppm													
5	P U S H	G2 24	4.0 8.0		SM	PID = 0.0/0.0 ppm Yellow brown to gray CINDERS and ASH, trace clinkers, approximately 20% silty SAND, layered, no odor, moist, trace coal-like material, clay fragments -FILL- PID = 0.9/0.0 ppm					20	30	20	20	10				
	P U S H	G3 35	8.0 12.0	8.5	SM	PID = 0.0/0.0 ppm Gray to light brown silty SAND with gravel (SM), mps 1.0 in., no structure, no odor, moist, approximately 15% cinders and ash -FILL-					5	15	20	20	20	20			
10					10.0	SM	Gray to black silty SAND (SM), approximately 50% black ash and coal-like mater, no odor, moist to wet below 10.5 ft PID = 1.2/0.0 ppm												
	P U S H	G4	12.0 16.0	12.0		Black sandy ELASTIC SILT/lean CLAY, 10% shell specks, brick specks, coal-like specks, wood fibers/fragments, moderate industrial fuel-like odor, wet PID = 0.0/0.0 ppm													
					13.2	OL/ OH	-FILL- Gray at top-olive ORGANIC SOIL (OL/OH), mps 5 mm, no structure, moderate hydrogen sulfide odor, wet, trace shell specks, fragments and peat fibers PID = 0.0/0.0 ppm												
15						-ORGANIC DEPOSITS- PID = 0.0/0.0 ppm													
				16.0		BOTTOM OF EXPLORATION 16.0 FT													

Water Level Data						Sample ID		Well Diagram		Summary	
Date	Time	Elapsed Time (hr.)	Depth (ft) to:			O - Open End Rod T - Thin Wall Tube U - Undisturbed Sample S - Splitspoon Sample G - Geoprobe				Overburden (ft)	16.0
			Bottom of Casing	Bottom of Hole	Water					Rock Cored (ft)	
										Samples	G4
										Boring No. HA104	

Field Tests: Dilatancy: R - Rapid S - Slow N - None Plasticity: N - Nonplastic L - Low M - Medium H - High
 Toughness: L - Low M - Medium H - High Dry Strength: N - None L - Low M - Medium H - High V - Very High

[†]Note: Maximum particle size (mps) is determined by direct observation within the limitations of sampler size.

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

GEOPROBE REPORT

Boring No. HA105

Project FORMER ENERGY INTERNATIONAL PARCEL, BOSTON, MA
 Client THE MCCOURT-BRODERICK LIMITED PARTNERSHIP
 Contractor GEOLOGIC-EARTH EXPLORATION, INC.


File No. 06318-502
 Sheet No. 1 of 1
 Start December 1, 2010
 Finish December 1, 2010
 Driller D. Jacobs

H&A Rep. M. Dodson

Elevation
 Datum Boston City Base

Location As planned-center
 of grid

		Casing	Sampler	Barrel	Drilling Equipment and Procedures		Finish		December 1, 2010							
Type		--	G	--	Rig Make & Model: Geoprobe		Driller		D. Jacobs							
Inside Diameter (in.)		--	2.0	--	Bit Type:		H&A Rep.		M. Dodson							
Hammer Weight (lb)		--	--	-	Drill Mud: None		Elevation									
Hammer Fall (in.)		--	--	-	Casing: None		Datum		Boston City Base							
					Hoist/Hammer: Automatic Hammer --		Location		As planned-center of grid							
					PID Make & Model: --											
Depth (ft)	Sampler Blows per 6 in.	Sample No. & Rec. (in.)	Sample Depth (ft)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size [†] , structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel		Sand			Field Test				
							% Coarse	% Fine	% Coarse	% Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	Strength
0	PUSH	G1 32	0.0 4.0		GW	Light gray brown well graded GRAVEL with sand (GW), mps 1.4 in., no structure, no odor, dry PID = 0.0/0.0 ppm -RAILROAD BALLAST-	35	30	15	15	20					
						2.3	SM	Dark gray silty SAND with gravel (SM), mps 1.1 in., no structure, no odor, dry to moist, 10% cinders, ash and clinkers/coal-like material -FILL- PID = 0.0/0.0 ppm/	20	30	25	10	15			
5	PUSH	G2 33	4.0 8.0		GP-GM	Gray brown poorly graded GRAVEL with silt and sand (GP), mps 1.0 in., no structure, no odor, moist -FILL- Note: Lean CLAY 6.2 to 6.5 ft. PID = 0.0/0.0 ppm/	10	40	10	10	20	10				
						6.5		Gray brown to yellow brown CINDERS, ASH, trace clinkers, no structure, no odor, moist PID = 0.0/0.0 ppm/	10	35	25	20	10			
10	PUSH	G3 41	8.0 12.0		ML/OL/OH	Note: Bottom 2.0 in. black sandy SILT/ORGANIC SOIL (ML/OL/OH), moderate petroleum-like odor, wet PID = 0.0/0.0 ppm										
						12.2	OL/OH	-FILL- Olive ORGANIC SOIL (OL/OH), mps 2 mm, no structure, no odor, wet PID = 0.0/0.0 ppm/					100	N	L	L
15						-ORGANIC DEPOSITS- PID = 0.0/0.0 ppm										
				16.0		BOTTOM OF EXPLORATION 16.0 FT										

Water Level Data						Sample ID		Well Diagram		Summary	
Date	Time	Elapsed Time (hr.)	Depth (ft) to:			O - Open End Rod T - Thin Wall Tube U - Undisturbed Sample S - Split Spoon Sample G - Geoprobe				Overburden (ft)	16.0
			Bottom of Casing	Bottom of Hole	Water					Rock Cored (ft)	
										Samples	G4
										Boring No. HA105	

Field Tests: Dilatancy: R - Rapid S - Slow N - None Plasticity: N - Nonplastic L - Low M - Medium H - High
 Toughness: L - Low M - Medium H - High Dry Strength: N - None L - Low M - Medium H - High V - Very High

[†]Note: Maximum particle size (mps) is determined by direct observation within the limitations of sampler size.

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

GEOPROBE REPORT

Boring No. HA106 (OW)

Project FORMER ENERGY INTERNATIONAL PARCEL, BOSTON, MA
 Client THE MCCOURT-BRODERICK LIMITED PARTNERSHIP
 Contractor GEOLOGIC-EARTH EXPLORATION, INC.

File No. 06318-502
 Sheet No. 1 of 2
 Start December 1, 2010
 Finish December 1, 2010
 Driller D. Jacobs

H&A Rep. M. Dodson
 Elevation 15.2
 Datum Boston City Base
 Location As planned-center of grid

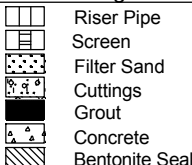
				Casing	Sampler	Barrel	Drilling Equipment and Procedures		Finish Driller	December 1, 2010								
Type	--	G	--				Rig Make & Model: Geoprobe	H&A Rep.	M. Dodson									
Inside Diameter (in.)	--	2.0	--				Bit Type:	Elevation	15.2									
Hammer Weight (lb)	--	--	-				Drill Mud: None	Datum	Boston City Base									
Hammer Fall (in.)	--	-	-				Casing: None	Location	As planned-center of grid									
							Hoist/Hammer: Automatic Hammer --											
							PID Make & Model: --											
Depth (ft)	Sampler Blows per 6 in.	Sample No. & Rec. (in.)	Sample Depth (ft)	Well Diagram	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size [†] , structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel		Sand			Field Test					
								% Coarse	% Fine	% Coarse	% Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	Strength	
0	PUSH	G1 33	0.0 4.0		13.2 2.0	GW-GM	Brown to gray well graded GRAVEL with sand and silt (GW-GM), mps 1.3 in., no structure, no odor, moist to dry PID = 4.2/0.0 ppm -PROBABLE RAILROAD BALLAST-	20	35	10	10	15	10					
SM						Yellow brown to gray brown silty SAND with gravel (SM), mps 0.5 in., no structure, no odor, moist to dry PID = 0.0/0.0 ppm												
12.2 3.0						CL	Yellow brown sandy lean CLAY (CL), mps 4 mm, no structure, no odor, fill			5	10	20	65	N	L	L		
	PUSH	G2 44	4.0 8.0		11.0 4.2	SM	-COHESIVE FILL- PID = 1.0/0.0 ppm/ Brown gray yellow silty SAND (SM), 40% cinders and ash, no structure, no odor, moist											
9.9 5.3						SM	-FILL- Gray white black CINDERS and ASH, trace clinkers, 10 to 15% silty SAND (SM), layered, no odor, moist -FILL- PID = 4.2/0.0 ppm											
7.7 7.5						SM/CL	Similar to above except 15% yellow lean CLAY (CL), 10% brick and concrete fragments, 5 to 10% coal-like material -FILL- PID = 8.5/0.0 ppm											
	PUSH	G3 19	8.0 12.0		5.2 10.0	SM/CL	Similar to above except black stained, moderate creosote-like odor, moist to wet, 10% wood fragments, 10% coal-like material, 10% brick fragment PID = 6.1/0.0 ppm											
	PUSH	G4 48	12.0 16.0				-FILL- PID = 0.0/0.0 ppm											

Water Level Data

Sample ID

Well Diagram

Summary

Date	Time	Elapsed Time (hr.)	Depth (ft) to:			O - Open End Rod T - Thin Wall Tube U - Undisturbed Sample S - Splitspoon Sample G - Geoprobe		Overburden (ft)		Rock Cored (ft)		Samples		G5	
			Bottom of Casing	Bottom of Hole	Water										

Boring No. HA106 (OW)

Field Tests: Dilatancy: R - Rapid S - Slow N - None Plasticity: N - Nonplastic L - Low M - Medium H - High
 Toughness: L - Low M - Medium H - High Dry Strength: N - None L - Low M - Medium H - High V - Very High

[†]Note: Maximum particle size (mps) is determined by direct observation within the limitations of sampler size.

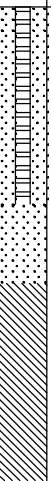
Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

GEOPROBE REPORT

Boring No. HA106 (OW)

File No. 06318-502

Sheet No. 2 of 2

Depth (ft)	Sampler Blows per 6 in.	Sample No. & Rec. (in.)	Sample Depth (ft)	Well Diagram	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size [†] , structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel		Sand				Field Test			
								% Coarse	% Fine	% Coarse	% Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	Strength
15					0.7 14.5	OL/ OH	Olive gray to gray below approximately 13.5 ft ORGANIC SOIL (OL/OH), mps 8 mm (shell fragment), no structure, moderate hydrogen sulfide odor, wet, 10% shell specks and peat fibers PID = 0.0/0.0 ppm PID = 0.0/0.0 ppm -ORGANIC DEPOSITS- PID = 0.0/0.0 ppm										
	P U S H	G5 48	16.0 20.0										100	N	L	L	
20					-4.8 20.0		BOTTOM OF EXPLORATION 20 FT										

NOTE: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Boring No. HA106 (OW)

GEOPROBE REPORT

Boring No. HA107

Project FORMER ENERGY INTERNATIONAL PARCEL, BOSTON, MA
 Client THE MCCOURT-BRODERICK LIMITED PARTNERSHIP
 Contractor GEOLOGIC-EARTH EXPLORATION, INC.

File No. 06318-502
 Sheet No. 1 of 1
 Start November 30, 2010
 Finish November 30, 2010
 Driller D. Jacobs

H&A Rep. M. Dodson

Elevation
 Datum Boston City Base

Location As planned-center
 of grid


				Casing	Sampler	Barrel	Drilling Equipment and Procedures		Finish		November 30, 2010										
Type				--	G	--	Rig Make & Model: Geoprobe		Driller		D. Jacobs										
Inside Diameter (in.)				--	2.0	--	Bit Type:		H&A Rep.		M. Dodson										
Hammer Weight (lb)				--	--	-	Drill Mud: None		Elevation												
Hammer Fall (in.)				--	--	-	Casing: None		Datum		Boston City Base										
							Hoist/Hammer: Automatic Hammer --		Location		As planned-center of grid										
							PID Make & Model: --														
Depth (ft)	Sampler Blows per 6 in.	Sample No. & Rec. (in.)	Sample Depth (ft)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION						Gravel		Sand		Field Test					
						(Color, GROUP NAME, max. particle size [†] , structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)						% Coarse	% Fine	% Coarse	% Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	Strength
0	P U S H	G1	0.0 4.0			60% well graded GRAVEL and BRICK fragments, 40% sand and silt, trace ash, cinders PID = 0.0/0.0 ppm -RAILROAD BALLAST-															
						2.5	SM	PID = 0.0/0.0 ppm Dark gray brown silty SAND (SM), mps 1.2 in., no structure, no odor, moist, 20% cinders and ash PID = 0.0/0.0 ppm						5	5	20	35	15	20		
	P U S H	G2	4.0 8.0	4.0	SM	-FILL- Similar to above except black, 35% cinders, clinkers and ash, trace glass fragments PID = 0.0/0.0 ppm PID = 0.0/0.0 ppm															
5						8.0	CL/OL/OH	Dark gray to black lean CLAY/ORGANIC SOIL (CL/ OL/OH), mps 0.6 in., no structure, slight petroleum-like odor, wet, 10% cinders and ash, trace wood, peat, glass PID = 0.0/0.2 ppm						5		5	5	85	N	L	L
	P U S H	G3	8.0 12.0			-FILL- PID = 3.5/0.0 ppm															
						11.0	CL/OL/OH	Similar to above except "sandy", moderate petroleum-like odor, slight sheen PID = 0.5/0.0 ppm													
	P U S H	G4	12.0 16.0			Note: No sheen below approximately 12.5 ft. PID = 0.0/0.0 ppm															
						14.5	CL	Olive ORGANIC SOIL (OL/OH), no structure, no odor, wet, trace shell specks and peat fibers -ORGANIC DEPOSITS-										5	95	N	L
15						BOTTOM OF EXPLORATION 16.0 FT															

Water Level Data

Sample ID

Well Diagram

Summary

Date	Time	Elapsed Time (hr.)	Depth (ft) to:			O - Open End Rod T - Thin Wall Tube U - Undisturbed Sample S - Splitspoon Sample G - Geoprobe		Overburden (ft) Rock Cored (ft) Samples G4
			Bottom of Casing	Bottom of Hole	Water			

Boring No. HA107

Field Tests:

Dilatancy: R - Rapid S - Slow N - None

Plasticity: N - Nonplastic L - Low M - Medium H - High

Toughness: L - Low M - Medium H - High

Dry Strength: N - None L - Low M - Medium H - High V - Very High

[†]Note: Maximum particle size (mps) is determined by direct observation within the limitations of sampler size.

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

GEOPROBE REPORT

Boring No. HA108

Project FORMER ENERGY INTERNATIONAL PARCEL, BOSTON, MA
 Client THE MCCOURT-BRODERICK LIMITED PARTNERSHIP
 Contractor GEOLOGIC-EARTH EXPLORATION, INC.


File No. 06318-502
 Sheet No. 1 of 1
 Start November 30, 2010
 Finish November 30, 2010
 Driller D. Jacobs

H&A Rep. M. Dodson

Elevation
 Datum Boston City Base

Location As planned-center
 of grid

				Casing	Sampler	Barrel	Drilling Equipment and Procedures		Finish		November 30, 2010									
Type				--	G	--	Rig Make & Model: Geoprobe		Driller		D. Jacobs									
Inside Diameter (in.)				--	2.0	--	Bit Type:		H&A Rep.		M. Dodson									
Hammer Weight (lb)				--	--	-	Drill Mud: None		Elevation											
Hammer Fall (in.)				--	--	-	Casing: None		Datum		Boston City Base									
						-	Hoist/Hammer: Automatic Hammer --		Location		As planned-center of grid									
							PID Make & Model: --													
Depth (ft)	Sampler Blows per 6 in.	Sample No. & Rec. (in.)	Sample Depth (ft)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION						Gravel		Sand			Field Test			
						(Color, GROUP NAME, max. particle size [†] , structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)						% Coarse	% Fine	% Coarse	% Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity
0	PUSH	G1 34	0.0 4.0	6.0	SM	Gray brown to brown silty SAND with gravel (SM), mps 1.0 in., no structure, no odor, moist to dry, 20% brick and concrete fragments, 5% cinders and ash, trace wood and porcelain, clay fragments PID = 0.0/0.0 ppm PID = 0.0/0.0 ppm -FILL- PID = 0.0/0.0 ppm	10	15	20	20	20	15								
5		PUSH	G2 24		4.0 8.0															
10	PUSH	G3 19	8.0 12.0		SM	Gray light gray, gray brown CINDERS, ASH, CLINKERS, 30% silty SAND (SM), mps 0.9 in., layered, no odor, moist, 5% brick and concrete specks/fragments, trace glass PID = 0.0/0.0 ppm	5	35	25	20	5	10								
	PUSH	G4 37	12.0 16.0		13.0		-FILL- PID = 0.0/0.0 ppm													
				14.0	OL/OH	Black ORGANIC SOIL (OL/OH) interbedded with black CINDERS, ASH and CLINKERS, 20% wood fragments					10	90	S	N	N					
					OL/OH	-HARBOR MUD (FILL)- Olive ORGANIC SOIL (OL/OH), mps 1 mm, no structure, H2S odor, wet, trace shell fragments and peat fibers PID = 0.0/0.0 ppm					5	95	N	L	L					
15				16.0		-ORGANIC DEPOSITS-														
						BOTTOM OF EXPLORATION 16.0 FT														

Water Level Data						Sample ID	Well Diagram	Summary	
Date	Time	Elapsed Time (hr.)	Depth (ft) to:			O - Open End Rod T - Thin Wall Tube U - Undisturbed Sample S - Splitspoon Sample G - Geoprobe		Overburden (ft)	16.0
			Bottom of Casing	Bottom of Hole	Water			Rock Cored (ft)	Samples
								Boring No.	HA108
Field Tests:			Dilatancy: R - Rapid S - Slow N - None			Plasticity: N - Nonplastic L - Low M - Medium H - High			
			Toughness: L - Low M - Medium H - High			Dry Strength: N - None L - Low M - Medium H - High V - Very High			
†Note: Maximum particle size (mps) is determined by direct observation within the limitations of sampler size.									
Note: Soil identification based on visual-manual methods of the USCS as practiced by Halev & Aldrich, Inc.									

GEOPROBE REPORT

Boring No. HA109

Project FORMER ENERGY INTERNATIONAL PARCEL, BOSTON, MA
 Client THE MCCOURT-BRODERICK LIMITED PARTNERSHIP
 Contractor GEOLOGIC-EARTH EXPLORATION, INC.


File No. 06318-502
 Sheet No. 1 of 1
 Start November 30, 2010
 Finish November 30, 2010
 Driller D. Jacobs

H&A Rep. M. Dodson

Elevation
 Datum Boston City Base

Location As planned-center
 of grid

				Casing	Sampler	Barrel	Drilling Equipment and Procedures	Finish November 30, 2010 Driller D. Jacobs H&A Rep. M. Dodson Elevation Datum Boston City Base Location As planned-center of grid											
Type				--	G	--	Rig Make & Model: Geoprobe Bit Type:												
Inside Diameter (in.)				--	2.0	--	Drill Mud: None												
Hammer Weight (lb)				--	--	-	Casing: None												
Hammer Fall (in.)				--	--	-	Hoist/Hammer: Automatic Hammer -- PID Make & Model: --												
Depth (ft)	Sampler Blows per 6 in.	Sample No. & Rec. (in.)	Sample Depth (ft)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size [†] , structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel		Sand			Field Test							
							% Coarse	% Fine	% Coarse	% Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	Strength			
0	PUSH	G1 32	0.0 4.0		SM/CL	Gray to brown silty SAND with gravel (SM), mps 1.3 in., no structure, no odor, moist to dry, approximately 35% brick and gravel fragments, 5% ash and cinders, trace fabric, frequent lean CLAY pieces PID = 0.0/0.0 ppm PID = 2.9/0.0 ppm -FILL-	10	10	25	20	15	20							
5		PUSH	G2 40		4.0 8.0		PID = 0.0/0.0 ppm												
				6.0	CL	Note: Cohesive/ORGANIC FILL 6.0 to 7.0 ft. PID = 0.0/0.0 ppm													
				7.0															
	PUSH	G3 26	8.0 12.0		GP	-FILL- PID = 0.0/0.0 ppm Note: Approximately 50% ash and cinders from 9.0 to 11.0 ft, 5% coal-like material. Note: Wet below approximately 10.0 ft. PID = 0.0/0.2 ppm													
10		GP			10.5 11.0	Primarily GRAVEL from 10.5 to 11.0 ft													
	PUSH	G4 29	12.0 16.0			-FILL- PID = 0.0/0.0 ppm Note: 100% cinders and ash from 14.0 to 15.5 ft, no odor. PID = 0.0/0.0 ppm													
15		PUSH	G5 25		16.0 20.0	16.5	OL/OH	PID = 0.0/0.0 ppm Olive ORGANIC SOIL (OL/OH), no structure, H2S odor, wet, trace peat fibers and shell specks/fragments PID = 0.0/0.0 ppm -ORGANIC DEPOSITS-											
20				20.0		BOTTOM OF EXPLORATION 20.0 FT													

Water Level Data						Sample ID		Well Diagram		Summary	
Date	Time	Elapsed Time (hr.)	Depth (ft) to:			O - Open End Rod T - Thin Wall Tube U - Undisturbed Sample S - Splitspoon Sample G - Geoprobe				Overburden (ft)	20.0
			Bottom of Casing	Bottom of Hole	Water					Rock Cored (ft)	
										Samples	G5
										Boring No. HA109	

Field Tests: Dilatancy: R - Rapid S - Slow N - None Plasticity: N - Nonplastic L - Low M - Medium H - High
 Toughness: L - Low M - Medium H - High Dry Strength: N - None L - Low M - Medium H - High V - Very High

[†]Note: Maximum particle size (mps) is determined by direct observation within the limitations of sampler size.

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

GEOPROBE REPORT

Boring No. HA110

Project FORMER ENERGY INTERNATIONAL PARCEL, BOSTON, MA
 Client THE MCCOURT-BRODERICK LIMITED PARTNERSHIP
 Contractor GEOLOGIC-EARTH EXPLORATION, INC.


File No. 06318-502
 Sheet No. 1 of 1
 Start November 30, 2010
 Finish November 30, 2010
 Driller D. Jacobs

H&A Rep. M. Dodson

Elevation
 Datum Boston City Base

Location As planned-center
 of grid

				Casing	Sampler	Barrel	Drilling Equipment and Procedures		Finish November 30, 2010								
Type				--	G	--	Rig Make & Model: Geoprobe		Driller D. Jacobs								
Inside Diameter (in.)				--	2.0	--	Bit Type:		H&A Rep. M. Dodson								
Hammer Weight (lb)				--	--	-	Drill Mud: None		Elevation								
Hammer Fall (in.)				--	--	-	Casing: None		Datum Boston City Base								
				--	--	-	Hoist/Hammer: Automatic Hammer --		Location As planned-center of grid								
				--	--	-	PID Make & Model: --										
Depth (ft)	Sampler Blows per 6 in.	Sample No. & Rec. (in.)	Sample Depth (ft)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size [†] , structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel		Sand			Field Test					
							% Coarse	% Fine	% Coarse	% Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	Strength	
0	PUSH	G1 31	0.0 4.0		SM	Brown silty SAND with gravel (SM), mps 1.2 in., no structure, no odor, moist to dry, 20% brick and concrete fragments, specks, trace coal-like material PID = 0.0/0.0 ppm	5	10	15	20	35	15					
				2.5	CL/EH	-FILL- Dark gray sandy lean CLAY/elastic SILT (CL/EH), mps 0.5 in., no structure, no odor, moist, 10% coal-like material, 10% cinders and clinkers, color variation PID = 0.0/0.0 ppm		10	15	10	20	45					
5	PUSH	G2 27	4.0 8.0		SC/SM	-FILL- PID = 0.0/0.0 ppm											
				6.0	SC/SM	Dark olive gray clayey/silty SAND with gravel (SC/SM), mps 1.4 in., disturbed, no odor, moist, 20% ash and cinders, 5% brick fragments, 5% concrete fragments, trace coal-like material, porcelain, wood, glass, wet below approximately 10.0 ft PID = 0.0/0.0 ppm PID = 0.0/0.0 ppm	20	10	10	10	10	40	N S	L N	L N		
	PUSH	G3 26	8.0 12.0			-FILL- PID = 0.0/0.0 ppm											
10						PID = 0.0/0.0 ppm											
						PID = 0.0/0.0 ppm											
						PID = 0.0/0.0 ppm											
15					16.0	OL/OH	Olive ORGANIC SOIL (OL/OH), mps 0.5 in., (shell), no structure, moderate H2S odor, wet, trace shells, organic fibers (peat) PID = 0.0/0.0 ppm					5	95	N	M	L	
						-ORGANIC DEPOSITS-											
20				20.0		BOTTOM OF EXPLORATION 20.0 FT											

Water Level Data						Sample ID		Well Diagram		Summary	
Date	Time	Elapsed Time (hr.)	Depth (ft) to:			O - Open End Rod T - Thin Wall Tube U - Undisturbed Sample S - Splitspoon Sample G - Geoprobe				Overburden (ft)	20.0
			Bottom of Casing	Bottom of Hole	Water					Rock Cored (ft)	
										Samples	G3
										Boring No. HA110	

Field Tests: Dilatancy: R - Rapid S - Slow N - None Plasticity: N - Nonplastic L - Low M - Medium H - High
 Toughness: L - Low M - Medium H - High Dry Strength: N - None L - Low M - Medium H - High V - Very High

[†]Note: Maximum particle size (mps) is determined by direct observation within the limitations of sampler size.

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

GEOPROBE REPORT

Boring No. HA111 (OW)

Project FORMER ENERGY INTERNATIONAL PARCEL, BOSTON, MA
 Client THE MCCOURT-BRODERICK LIMITED PARTNERSHIP
 Contractor GEOLOGIC-EARTH EXPLORATION, INC.

File No. 06318-502
 Sheet No. 1 of 1
 Start November 29, 2010
 Finish November 29, 2010
 Driller D. Jacobs

H&A Rep. M. Dodson

Elevation 14.3
 Datum Boston City Base

Location As planned-center
 of grid

				Casing	Sampler	Barrel	Drilling Equipment and Procedures		Finish Driller D. Jacobs							
Type				--	G	--	Rig Make & Model: Geoprobe		H&A Rep. M. Dodson							
Inside Diameter (in.)				--	2.0	--	Bit Type:		Elevation 14.3							
Hammer Weight (lb)				--	--	-	Drill Mud: None		Datum Boston City Base							
Hammer Fall (in.)				--	-	-	Casing: None		Location As planned-center of grid							
				--	-	-	Hoist/Hammer: Automatic Hammer --									
							PID Make & Model: --									
Depth (ft)	Sampler Blows per 6 in.	Sample No. & Rec. (in.)	Sample Depth (ft)	Well Diagram	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size [†] , structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel		Sand			Field Test			
								% Coarse	% Fine	% Coarse	% Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity
0	PUSH	G1 44	0.0		13.9	SM	-ASPHALT-	5	15	20	20	20				
4.0			PID = 0.0/0.0 ppm Gray brown silty SAND with gravel (SM), mps 1.3 in., disturbed with small pockets of cohesive soils, yellow sandy SILT, and approximately 10% cinders and ash, no odor, moist to dry PID = 0.0/0.0 ppm													
5	PUSH	G2 28	4.0		8.8	SM	-FILL- Note: Approximately 20% brick fragments and trace coal-like material from 4.0 to 5.5 ft. PID = 0.0/0.0 ppm									
8.0			PID = 0.0/0.0 ppm Approximately 80% gray CINDERS, ASH, CLINKERS, approximately 20% silty SAND (SM), mps 1.0 in., no structure, no odor, wet below approximately 6.5 ft. PID = 0.0/0.0 ppm													
10	PUSH	G3 33	8.0		4.8	OL/OH /CL	-FILL- PID = 0.0/0.0 ppm Dark olive gray to olive to black ORGANIC SOIL/lean CLAY (OL/OH /CL), mps 5 mm, no structure, petroleum-like odor, wet, occasional ash/cinders PID = 0.7/0.0 ppm					10	90	N	L	L
12.0			PID = 0.0/0.0 ppm -COHESIVE FILL- PID = 0.3/0.0 ppm													
15	PUSH	G4 12	12.0		-1.7	OL-OH	PID = 0.4/0.0 ppm Olive to olive gray ORGANIC SOIL (OL-OH), mps 1 mm, laminated, H2S odor, wet, trace peat fibers and shell specs PID = 0.0/0.0 ppm					5	95	N	L	L
16.0			-ORGANIC DEPOSITS- PID = 0.0/0.0 ppm													
20					-5.7		BOTTOM OF EXPLORATION 20.0 FT Note: Installed 2-in. observation well in completed borehole to 14.0 ft.									
					20.0											

Water Level Data

Sample ID

Well Diagram

Summary

Date	Time	Elapsed Time (hr.)	Depth (ft) to:			O - Open End Rod T - Thin Wall Tube U - Undisturbed Sample S - Splitspoon Sample G - Geoprobe		Riser Pipe Screen Filter Sand Cuttings Grout Concrete Bentonite Seal	Overburden (ft)		Rock Cored (ft)		Samples	G5	Boring No.	HA111 (OW)
			Bottom of Casing	Bottom of Hole	Water				20.0							
11/29/2010	0700	17.0	installed well			9.9										

Field Tests:

Dilatancy: R - Rapid S - Slow N - None

Plasticity: N - Nonplastic L - Low M - Medium H - High

Toughness: L - Low M - Medium H - High

Dry Strength: N - None L - Low M - Medium H - High V - Very High

[†]Note: Maximum particle size (mps) is determined by direct observation within the limitations of sampler size.

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Project FORMER ENERGY INTERNATIONAL PARCEL, BOSTON, MA
Client THE MCCOURT-BRODERICK LIMITED PARTNERSHIP
Contractor GEOLOGIC-EARTH EXPLORATION, INC.

File No.	06318-502
Sheet No.	1 of 1
Start	November 29, 2010
Finish	November 29, 2010
Driller	D. Jacobs







H&A Rep. M. Dodson

Elevation	
Datum	Boston City Base

Location	As planned-center of grid
----------	------------------------------

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	G	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	2.0	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud: None
Hammer Fall (in.)	--	--	-	Casing: None
				Hoist/Hammer: Automatic Hammer --
				PID Make & Model: --

[illegible]

Water Level Data						Sample ID	Well Diagram	Summary		
Date	Time	Elapsed Time (hr.)	Depth (ft) to:			O - Open End Rod T - Thin Wall Tube U - Undisturbed Sample S - Splitspoon Sample G - Geoprobe		Riser Pipe	Overburden (ft)	20.0
			Bottom of Casing	Bottom of Hole	Water			Screen	Rock Cored (ft)	
								Filter Sand	Cuttings	G5
								Grout		
								Concrete		
							Bentonite Seal			
								Boring No.	HA112	

Field Tests:	Dilatancy: R - Rapid S - Slow N - None	Plasticity: N - Nonplastic L - Low M - Medium H - High
	Toughness: L - Low M - Medium H - High	Dry Strength: N - None L - Low M - Medium H - High V - Very High

[†] Note: Maximum particle size (mps) is determined by direct observation within the limitations of sampler size.

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

GEOPROBE REPORT

Boring No. HA113

Project FORMER ENERGY INTERNATIONAL PARCEL, BOSTON, MA
 Client THE MCCOURT-BRODERICK LIMITED PARTNERSHIP
 Contractor GEOLOGIC-EARTH EXPLORATION, INC.


File No. 06318-502
 Sheet No. 1 of 1
 Start November 29, 2010
 Finish November 29, 2010
 Driller D. Jacobs

H&A Rep. M. Dodson

Elevation
 Datum Boston City Base

Location As planned-center
 of grid

				Casing	Sampler	Barrel	Drilling Equipment and Procedures		Finish November 29, 2010							
Type				--	G	--	Rig Make & Model: Geoprobe		Driller D. Jacobs							
Inside Diameter (in.)				--	2.0	--	Bit Type:		H&A Rep. M. Dodson							
Hammer Weight (lb)				--	--	-	Drill Mud: None		Elevation							
Hammer Fall (in.)				--	--	-	Casing: None		Datum Boston City Base							
							Hoist/Hammer: Automatic Hammer --		Location As planned-center of grid							
							PID Make & Model: --									
Depth (ft)	Sampler Blows per 6 in.	Sample No. & Rec. (in.)	Sample Depth (ft)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size [†] , structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel		Sand			Field Test				
							% Coarse	% Fine	% Coarse	% Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	Strength
0	PUSH	G1 37	0.0 4.0	0.4	SM	-ASPHALT- PID = 0.1/0.0 ppm										
				1.6	SM/CL	Brown gray brown silty SAND with gravel (SM), mps 1.0 in., no structure, no odor, moist	5	15	20	20	25	20				
						Dark olive gray to black silty SAND with gravel (SM), interbedded with lean CLAY (20%) (CL), and CINDERS, ASH, CLINKERS (30%), no odor, moist, trace brick specks and concrete fragments				10	30	60				
5	PUSH	G2 35	4.0 8.0			-FILL- PID = 0.5/0.0 ppm PID = 0.2/0.0 ppm										
				7.0	SM	PID = 0.0/0.0 ppm Gray CINDERS, ASH, and CLINKERS approximately 30% silty SAND (SM), mps 1.0 in., no odor, moist	5	20	25	30	15	5				
10	PUSH	G3 18	8.0 12.0			-FILL- PID = 0.0/0.0 ppm										
				11.0	OL/OH/CL	PID = 0.0/0.0 ppm Note: Based on drill action, poor recovery.		5		5	5	85	N	L	L	
						Olive gray to gray ORGANIC SOIL/lean CLAY (OL/OH/CL), mps 5 mm, no structure, slight petroleum-like odor, wet										
						PID = 0.0/0.0 ppm										
15	PUSH	G4 48	12.0 16.0			-COHESIVE FILL- PID = 0.2/0.0 ppm										
				15.5	SW	Gray well graded SAND (SW), mps 0.3 in., no structure, slight petroleum-like odor, wet			15	50	35					
	PUSH	G5 48	16.0 20.0	16.2	OL-OH	-ESTUARINE DEPOSITS- PID = 0.0/0.0 ppm					5	95	N	L	L	
								Olive gray ORGANIC SOIL (OL-OH), mps 3 mm, no structure, slight H2S odor, wet, 5% peat fibers								
						PID = 0.0/0.0 ppm										
						-ORGANIC DEPOSITS-										
20				20.0		BOTTOM OF EXPLORATION 20.0 FT										

Water Level Data						Sample ID	Well Diagram	Summary
Date	Time	Elapsed Time (hr.)	Depth (ft) to:			O - Open End Rod T - Thin Wall Tube U - Undisturbed Sample S - Splitspoon Sample G - Geoprobe		Overburden (ft) 20.0 Rock Cored (ft) Samples G3
			Bottom of Casing	Bottom of Hole	Water			
Field Tests:						Dilatancy: R - Rapid S - Slow N - None Toughness: L - Low M - Medium H - High Plasticity: N - Nonplastic L - Low M - Medium H - High Dry Strength: N - None L - Low M - Medium H - High V - Very High		
†Note: Maximum particle size (mps) is determined by direct observation within the limitations of sampler size.								
Note: Soil identification based on visual-manual methods of the USCS as practiced by Halev & Aldrich, Inc.								

GEOPROBE REPORT

Boring No. HA-201

Project CYPHER STREET PARCEL, SOUTH BOSTON, MA
 Client THE MCCOURT CO., INC.
 Contractor NEW HAMPSHIRE BORING, INC.

File No. 06318-520
 Sheet No. 1 of 1
 Start March 2, 2012
 Finish March 2, 2012
 Driller C. Downing
 H&A Rep. D. Palleiko

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	-	G	-	Rig Make & Model: Geoprobe
Inside Diameter (in.)	-	2	-	Bit Type: Geoprobe spoon
Hammer Weight (lb)	-	-	-	Drill Mud: None
Hammer Fall (in.)	-	-	-	Casing:
				Hoist/Hammer: Automatic Hammer
				PID Make & Model: MiniRAE 2000

Depth (ft)	Sampler Blows per 6 in.	Sample No. & Rec. (in.)	Sample Depth (ft)	USCS Symbol	Stratum Change Elev/Depth (ft)	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	PID Readings (ppm)	Gravel		Sand			Field Test				
								% Coarse	% Fine	% Coarse	% Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	Strength
0	P U S H	G1 40	0.0 5.0	GP	0.4	Gray poorly graded GRAVEL (GP)		90	5			5					
						-BALLAST FILL-											
						70-80% ASH, COAL, BRICK in fragments, particles and specks, 10% gravel, 10% sand, black, mps 2 in., no structure, no odor, moist	ND										
						-ASH FILL-											
5	P U S H	G2 32	5.0 8.0		5.0	100% ASH, COAL, BRICK, CONCRETE gray to black, mps 1.2 in., no structure, no odor, moist to wet in pockets	ND										
						-ASH FILL-											
					8.0	BOTTOM OF EXPLORATION 8.0 FT											

Water Level Data						Sample ID	Well Diagram	Summary	
Date	Time	Elapsed Time (hr.)	Depth (ft) to:			O - Open End Rod T - Thin Wall Tube U - Undisturbed Sample S - Splitspoon Sample G - Geoprobe	<div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div></div>	Overburden (ft)	8.0
			Bottom of Casing	Bottom of Hole	Water			Rock Cored (ft)	-
								Samples	G2
								Boring No.	HA-201

Field Tests: Dilatancy: R - Rapid S - Slow N - None Plasticity: N - Nonplastic L - Low M - Medium H - High
 Toughness: L - Low M - Medium H - High Dry Strength: N - None L - Low M - Medium H - High V - Very High

*Note: Maximum particle size is determined by direct observation within the limitations of sampler size.

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Project CYPHER STREET PARCEL, SOUTH BOSTON, MA
Client THE MCCOURT CO., INC.
Contractor NEW HAMPSHIRE BORING, INC.

File No. 06318-520
Sheet No. 1 of 1
Start March 2, 2012
Finish March 2, 2012
Driller C. Downing
H&A Rep. D. Palleiko

Elevation Datum	
Location	See Plan

[illegible]

GEOPROBE REPORT








Boring No. HA-203

Project CYPHER STREET PARCEL, SOUTH BOSTON, MA
 Client THE MCCOURT CO., INC.
 Contractor NEW HAMPSHIRE BORING, INC.

File No. 06318-520
 Sheet No. 1 of 1
 Start March 2, 2012
 Finish March 2, 2012
 Driller C. Downing
 H&A Rep. D. Palleiko

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	-	G	-	Rig Make & Model: Geoprobe
Inside Diameter (in.)	-	2	-	Bit Type: Geoprobe spoon
Hammer Weight (lb)	-	-	-	Drill Mud: None
Hammer Fall (in.)	-	-	-	Casing:
				Hoist/Hammer: Automatic Hammer
				PID Make & Model: MiniRAE 2000

Depth (ft)	Sampler Blows per 6 in.	Sample No. & Rec. (in.)	Sample Depth (ft)	USCS Symbol	Stratum Change Elev/Depth (ft)	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	PID Readings (ppm)	Gravel		Sand		Field Test					
								% Coarse	% Fine	% Coarse	% Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	Strength
0	P U S H	G1 48	0.0 5.0	GP	0.3	Gray poorly graded GRAVEL (GP), mps 2 in., no structure, no odor, frozen	ND	90	5		5						
						-BALLAST FILL-											
						70-80% BRICK, CONCRETE, WOOD, ASH, CINDERS, COAL in fragments, particles and specks, 10% sand, 10% gravel, dark gray/red/black banded, mps 2 in., no structure, no odor, moist to wet in pockets											
						-FILL-											
5	P U S H	G2 24	5.0 8.0		5.0	100% ASH, CINDERS, WOOD in fragments, particles and specks, dark gray to black, mps 2 in., no structure, no odor, moist to wet	ND										
						-ASH FILL-											
					8.0	BOTTOM OF EXPLORATION 8.0 FT											

Water Level Data						Sample ID	Well Diagram	Summary		
Date	Time	Elapsed Time (hr.)	Depth (ft) to:		Water	O - Open End Rod T - Thin Wall Tube U - Undisturbed Sample S - Splitspoon Sample G - Geoprobe		Riser Pipe	Overburden (ft)	8.0
			Bottom of Casing	Bottom of Hole				Screen		
							Filter Sand	Samples	G2	
							Cuttings			Boring No.
							Grout			
						Concrete				
						Bentonite Seal				

Field Tests: Dilatancy: R - Rapid S - Slow N - None Plasticity: N - Nonplastic L - Low M - Medium H - High
 Toughness: L - Low M - Medium H - High Dry Strength: N - None L - Low M - Medium H - High V - Very High

*Note: Maximum particle size is determined by direct observation within the limitations of sampler size.

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

GEOPROBE REPORT

Boring No. HA-204

Project CYPHER STREET PARCEL, SOUTH BOSTON, MA
 Client THE MCCOURT CO., INC.
 Contractor NEW HAMPSHIRE BORING, INC.

File No. 06318-520
 Sheet No. 1 of 1
 Start March 2, 2012
 Finish March 2, 2012
 Driller C. Downing
 H&A Rep. D. Palleiko

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	-	G	-	Rig Make & Model: Geoprobe
Inside Diameter (in.)	-	2	-	Bit Type: Geoprobe spoon
Hammer Weight (lb)	-	-	-	Drill Mud: None
Hammer Fall (in.)	-	-	-	Casing:
				Hoist/Hammer: Automatic Hammer
				PID Make & Model: MiniRAE 2000

Depth (ft)	Sampler Blows per 6 in.	Sample No. & Rec. (in.)	Sample Depth (ft)	USCS Symbol	Stratum Change Elev/Depth (ft)	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	PID Readings (ppm)	Gravel		Sand		Field Test					
								% Coarse	% Fine	% Coarse	% Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	Strength
0	P U S H	G1 46	0.0 5.0		0.3	-BITUMINOUS CONCRETE PAVING-	ND										
						80% ASH, COAL, CINDERS, SLAG in fragments, particles and specks, dark brown to black, mps 1.2 in.											
						-ASH FILL-											
5	P U S H	G2 34	5.0 8.0		5.0	100% ASH, COAL, CINDERS, FLY ASH in fragments, particles and specks, dark gray to gray, mps 0.8 in., no structure, no odor, moist to wet	ND										
					8.0	-ASH FILL-											
						BOTTOM OF EXPLORATION 8.0 FT											

Water Level Data						Sample ID O - Open End Rod T - Thin Wall Tube U - Undisturbed Sample S - Splitspoon Sample G - Geoprobe	Well Diagram <div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div></div> <div>Riser Pipe Screen Filter Sand Cuttings Grout Concrete Bentonite Seal</div>	Summary	
Date	Time	Elapsed Time (hr.)	Depth (ft) to:		Water			Overburden (ft)	8.0
			Bottom of Casing	Bottom of Hole				Rock Cored (ft)	-
						Samples	G2		
							Boring No.	HA-204	

Field Tests: Dilatancy: R - Rapid S - Slow N - None Plasticity: N - Nonplastic L - Low M - Medium H - High
 Toughness: L - Low M - Medium H - High Dry Strength: N - None L - Low M - Medium H - High V - Very High

*Note: Maximum particle size is determined by direct observation within the limitations of sampler size.

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

GEOPROBE REPORT








Boring No. HA-205

Project CYPHER STREET PARCEL, SOUTH BOSTON, MA
 Client THE MCCOURT CO., INC.
 Contractor NEW HAMPSHIRE BORING, INC.

File No. 06318-520
 Sheet No. 1 of 1
 Start March 2, 2012
 Finish March 2, 2012
 Driller C. Downing
 H&A Rep. D. Palleiko

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	-	G	-	Rig Make & Model: Geoprobe
Inside Diameter (in.)	-	2	-	Bit Type: Geoprobe spoon
Hammer Weight (lb)	-	-	-	Drill Mud: None
Hammer Fall (in.)	-	-	-	Casing:
				Hoist/Hammer: Automatic Hammer
				PID Make & Model: MiniRAE 2000

Depth (ft)	Sampler Blows per 6 in.	Sample No. & Rec. (in.)	Sample Depth (ft)	USCS Symbol	Stratum Change Elev/Depth (ft)	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	PID Readings (ppm)	Gravel		Sand			Field Test				
								% Coarse	% Fine	% Coarse	% Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	Strength
0	P U S H	G1 45	0.0		0.3	-BITUMINOUS CONCRETE PAVING-	ND										
			5.0			80-90% ASH, COAL, CINDERS, SLAG, BRICK, CERAMIC in fragments, particles and specks, 5% sand, 5% gravel, dark gray to black, mps 2 in., no structure, no odor, moist											
					5.0	-ASH FILL-											
5	P U S H	G2 29	5.0		5.0	70-80% COAL, ASH, CINDERS, SLAG, FLY ASH, WOOD in fragments, particles and specks, 10% sand, 10% gravel, dark gray to black, mps 1.2 in., no structure, no odor, moist to wet	ND										
			8.0			-ASH FILL-											
					8.0	BOTTOM OF EXPLORATION 8.0 FT											

Water Level Data						Sample ID	Well Diagram	Summary		
Date	Time	Elapsed Time (hr.)	Depth (ft) to:			O - Open End Rod T - Thin Wall Tube U - Undisturbed Sample S - Splitspoon Sample G - Geoprobe		Riser Pipe	Overburden (ft)	8.0
			Bottom of Casing	Bottom of Hole	Water			Screen	Rock Cored (ft)	-
								Filter Sand	Samples	G2
								Cuttings	Boring No.	HA-205
								Grout		
							Concrete			
							Bentonite Seal			

Field Tests: Dilatancy: R - Rapid S - Slow N - None Plasticity: N - Nonplastic L - Low M - Medium H - High
 Toughness: L - Low M - Medium H - High Dry Strength: N - None L - Low M - Medium H - High V - Very High

*Note: Maximum particle size is determined by direct observation within the limitations of sampler size.

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

GEOPROBE REPORT

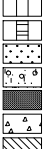
Boring No. HA-206

Project CYPHER STREET PARCEL, SOUTH BOSTON, MA
 Client THE MCCOURT CO., INC.
 Contractor NEW HAMPSHIRE BORING, INC.

File No. 06318-520
 Sheet No. 1 of 1
 Start March 2, 2012
 Finish March 2, 2012
 Driller C. Downing
 H&A Rep. D. Palleiko

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	-	G	-	Rig Make & Model: Geoprobe
Inside Diameter (in.)	-	2	-	Bit Type: Geoprobe spoon
Hammer Weight (lb)	-	-	-	Drill Mud: None
Hammer Fall (in.)	-	-	-	Casing:
				Hoist/Hammer: Automatic Hammer
				PID Make & Model: MiniRAE 2000

Depth (ft)	Sampler Blows per 6 in.	Sample No. & Rec. (in.)	Sample Depth (ft)	USCS Symbol	Stratum Change Elev/Depth (ft)	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	PID Readings (ppm)	Gravel		Sand			Field Test				
								% Coarse	% Fine	% Coarse	% Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	Strength
0	P U S H	G1 44	0.0 5.0			80-90% ASH, CINDERS, SLAG, COAL, BRICK, WOOD in fragments, particles and specks, increasing ash with depth, 10% sand, dark brown to black, mps 2 in., no odor, moist to wet in pockets 											

Water Level Data						Sample ID	Well Diagram	Summary
Date	Time	Elapsed Time (hr.)	Depth (ft) to:			O - Open End Rod T - Thin Wall Tube U - Undisturbed Sample S - Splitspoon Sample G - Geoprobe		Overburden (ft) 8.0
			Bottom of Casing	Bottom of Hole	Water			Rock Cored (ft) -
								Samples G2
								Boring No. HA-206

Field Tests: Dilatancy: R - Rapid S - Slow N - None Plasticity: N - Nonplastic L - Low M - Medium H - High
 Toughness: L - Low M - Medium H - High Dry Strength: N - None L - Low M - Medium H - High V - Very High

*Note: Maximum particle size is determined by direct observation within the limitations of sampler size.

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

GEOPROBE REPORT

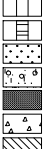
Boring No. HA-207

Project CYPHER STREET PARCEL, SOUTH BOSTON, MA
 Client THE MCCOURT CO., INC.
 Contractor NEW HAMPSHIRE BORING, INC.

File No. 06318-520
 Sheet No. 1 of 1
 Start March 2, 2012
 Finish March 2, 2012
 Driller C. Downing
 H&A Rep. D. Palleiko

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	-	G	-	Rig Make & Model: Geoprobe
Inside Diameter (in.)	-	2	-	Bit Type: Geoprobe spoon
Hammer Weight (lb)	-	-	-	Drill Mud: None
Hammer Fall (in.)	-	-	-	Casing:
				Hoist/Hammer: Automatic Hammer
				PID Make & Model: MiniRAE 2000
				Elevation
				Datum
				Location See Plan

Depth (ft)	Sampler Blows per 6 in.	Sample No. & Rec. (in.)	Sample Depth (ft)	USCS Symbol	Stratum Change Elev/Depth (ft)	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	PID Readings (ppm)	Gravel % Coarse % Fine	Sand % Coarse % Medium % Fine	% Fines	Field Test Dilatancy Toughness Plasticity Strength
0	P U S H	G1 48	0.0 5.0		0.4	-BITUMINOUS CONCRETE PAVING-					
						80-90% ASH, COAL, CINDERS in fragments, particles and specks, 10% sand, 10% gravel, gray to black, mps 2 in., no structure, no odor, moist	ND				
						-ASH FILL-					
5	P U S H	G2 30	5.0 8.0		5.0	80-90% ASH, COAL, CINDERS, WOOD FIBERS in fragments, particles and specks, 10% sand, 10% gravel, dark gray to black, mps 0.9 in., no structure, no odor, moist to wet in pockets	ND				
						-ASH FILL-					
					8.0	BOTTOM OF EXPLORATION 8.0 FT					

Water Level Data				Sample ID	Well Diagram	Summary
Date	Time	Elapsed Time (hr.)	Depth (ft) to:	O - Open End Rod T - Thin Wall Tube U - Undisturbed Sample S - Split spoon Sample G - Geoprobe		Overburden (ft) 8.0
			Bottom of Casing Bottom of Hole Water			Rock Cored (ft) -
						Samples G2
						Boring No. HA-207

Field Tests: Dilatancy: R - Rapid S - Slow N - None Plasticity: N - Nonplastic L - Low M - Medium H - High
 Toughness: L - Low M - Medium H - High Dry Strength: N - None L - Low M - Medium H - High V - Very High

*Note: Maximum particle size is determined by direct observation within the limitations of sampler size.

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

GEOPROBE REPORT

Boring No. HA-208

Project CYPHER STREET PARCEL, SOUTH BOSTON, MA
 Client THE MCCOURT CO., INC.
 Contractor NEW HAMPSHIRE BORING, INC.

File No. 06318-520
 Sheet No. 1 of 1
 Start March 2, 2012
 Finish March 2, 2012
 Driller C. Downing
 H&A Rep. D. Palleiko

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	-	G	-	Rig Make & Model: Geoprobe
Inside Diameter (in.)	-	2	-	Bit Type: Geoprobe spoon
Hammer Weight (lb)	-	-	-	Drill Mud: None
Hammer Fall (in.)	-	-	-	Casing:
				Hoist/Hammer: Automatic Hammer
				PID Make & Model: MiniRAE 2000

Depth (ft)	Sampler Blows per 6 in.	Sample No. & Rec. (in.)	Sample Depth (ft)	USCS Symbol	Stratum Change Elev/Depth (ft)	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	PID Readings (ppm)	Gravel		Sand			Field Test			
								% Coarse	% Fine	% Coarse	% Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity
0	P U S H	G1 50	0.0 5.0	SM		Dark gray/gray/brown interbedded silty SAND with gravel (SM), mps 1.2 in., frequent interbeds silty sand with gravel and ash up to 6.0 in. thick, no odor, moist, 50-60% ASH, CINDERS in fragments, particles and specks 										

Water Level Data				Sample ID		Well Diagram		Summary	
Date	Time	Elapsed Time (hr.)	Depth (ft) to:						
			Bottom of Casing	Bottom of Hole	Water	O - Open End Rod		Riser Pipe	Overburden (ft) 8.0
						T - Thin Wall Tube		Screen	Rock Cored (ft) -
						U - Undisturbed Sample		Filter Sand	Samples G2
						S - Split spoon Sample		Cuttings	
						G - Geoprobe		Grout	
								Concrete	
								Bentonite Seal	

Field Tests: Dilatancy: R - Rapid S - Slow N - None Plasticity: N - Nonplastic L - Low M - Medium H - High
 Toughness: L - Low M - Medium H - High Dry Strength: N - None L - Low M - Medium H - High V - Very High

*Note: Maximum particle size is determined by direct observation within the limitations of sampler size.

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

APPENDIX C

Groundwater Well Installation Reports

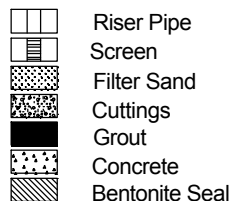
GROUNDWATER OBSERVATION WELL
INSTALLATION REPORT

Well No. HA103 (OW)

Boring No. HA103 (OW)

Project FORMER ENERGY INTERNATIONAL PARCEL
 Location BOSTON, MA
 Client THE MCCOURT-BRODERICK LIMITED PARTNERSHIP
 Contractor GEOLOGIC-EARTH EXPLORATION, INC.
 Driller D. Jacobs

Well Diagram



File No. 06318-502

Date Installed 1 Dec 2010

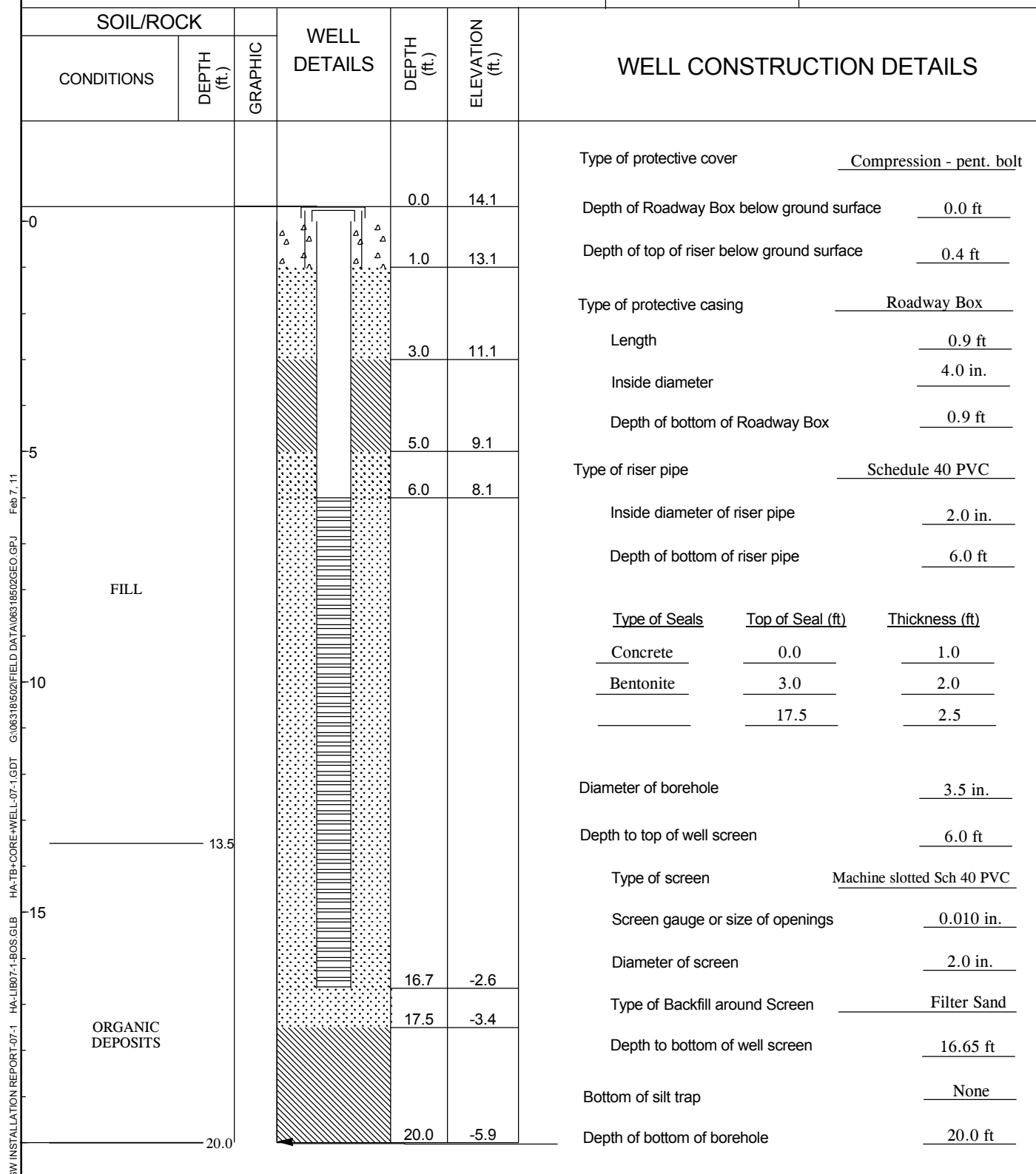
H&A Rep. M. Dodson

Location As planned-center of grid

Ground El. 14.1

Datum Boston City Base

Initial Water Level (depth bgs) ft



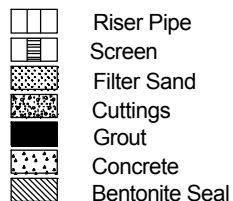
GROUNDWATER OBSERVATION WELL
INSTALLATION REPORT

Well No. HA106 (OW)

Boring No. HA106 (OW)

Project FORMER ENERGY INTERNATIONAL PARCEL
 Location BOSTON, MA
 Client THE MCCOURT-BRODERICK LIMITED PARTNERSHIP
 Contractor GEOLOGIC-EARTH EXPLORATION, INC.
 Driller D. Jacobs

Well Diagram



File No. 06318-502

Date Installed 1 Dec 2010

H&A Rep. M. Dodson

Location As planned-center of grid

Ground El. 15.2

Datum Boston City Base

Initial Water Level (depth bgs)

ft

SOIL/ROCK

CONDITIONS

DEPTH
(ft.)

GRAPHIC

WELL
DETAILSDEPTH
(ft.)ELEVATION
(ft.)

WELL CONSTRUCTION DETAILS

Type of protective cover Compression - pent. boltHeight of Roadway Box above ground surface 0.3 ftDepth of top of riser below ground surface 0.2 ftType of protective casing Roadway BoxLength 0.9 ftInside diameter 4.0 in.Depth of bottom of Roadway Box 0.6 ftType of riser pipe Schedule 40 PVCInside diameter of riser pipe 2.0 in.Depth of bottom of riser pipe 6.5 ft

Type of Seals	Top of Seal (ft)	Thickness (ft)
Concrete	0.3	0.7
Bentonite	3.5	2.0
	17.5	2.5

Diameter of borehole 3.5 in.Depth to top of well screen 6.5 ftType of screen Machine slotted Sch 40 PVCScreen gauge or size of openings 0.010 in.Diameter of screen 2.0 in.Type of Backfill around Screen Filter SandDepth to bottom of well screen 16.5 ftBottom of silt trap NoneDepth of bottom of borehole 20.0 ft

Feb 7, 11

G:\06318\502\FIELD DATA\06318502GEO.GPJ

HA-TB-CORE-WELL-07-1.GDT

HA-LIB07-1-BOS.GLB

GW INSTALLATION REPORT-07-1

PROBABLE
RAILROAD
BALLAST

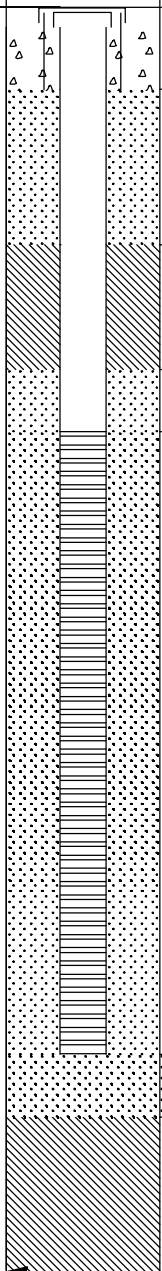
2.0

FILL

14.5

ORGANIC
DEPOSITS

20.0



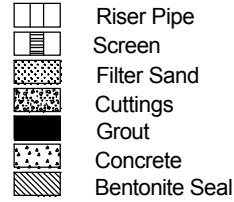
GROUNDWATER OBSERVATION WELL
INSTALLATION REPORT

Well No. HA111 (OW)

Boring No. HA111 (OW)

Project FORMER ENERGY INTERNATIONAL PARCEL
 Location BOSTON, MA
 Client THE MCCOURT-BRODERICK LIMITED PARTNERSHIP
 Contractor GEOLOGIC-EARTH EXPLORATION, INC.
 Driller D. Jacobs

Well Diagram



File No. 06318-502

Date Installed 29 Nov 2010

H&A Rep. M. Dodson

Location As planned-center of grid

Ground El. 14.3

Datum Boston City Base

Initial Water Level (depth bgs)

9.9 ft

SOIL/ROCK

CONDITIONS

DEPTH
(ft.)

GRAPHIC

WELL
DETAILSDEPTH
(ft.)ELEVATION
(ft.)

WELL CONSTRUCTION DETAILS

Type of protective cover Compression - pent. boltDepth of Roadway Box below ground surface 0.0 ftDepth of top of riser below ground surface 0.3 ftType of protective casing Roadway BoxLength 0.9 ftInside diameter 4.0 in.Depth of bottom of Roadway Box 0.9 ftType of riser pipe Schedule 40 PVCInside diameter of riser pipe 2.0 in.Depth of bottom of riser pipe 4.5 ft

Type of Seals	Top of Seal (ft)	Thickness (ft)
Concrete	0.0	1.0
Bentonite	1.5	2.0
	-	-

Diameter of borehole 3.5 in.Depth to top of well screen 4.5 ftType of screen Machine slotted Sch 40 PVCScreen gauge or size of openings 0.010 in.Diameter of screen 2.0 in.Type of Backfill around Screen Filter SandDepth to bottom of well screen 14.5 ftBottom of silt trap NoneDepth of bottom of borehole 20.0 ft

Feb 7, 11

G:\06318\502\FIELD DATA\06318502GEO.GPJ

HA-TB-CORE-WELL-07-1.GDT

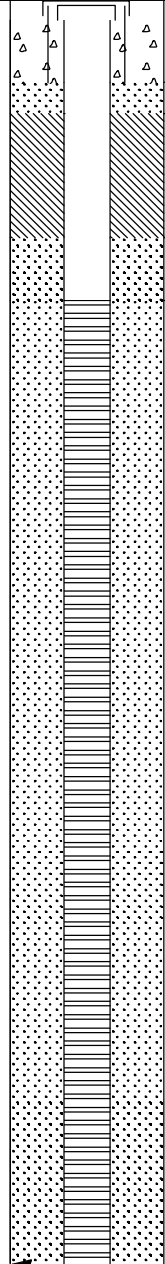
HA-LIB07-1-BOS.GLB

GW INSTALLATION REPORT-07-1

ASPHALT

FILL

COHESIVE FILL

ORGANIC
DEPOSITS

APPENDIX D

Laboratory Data Reports

(Provided Electronically on CD)



ANALYTICAL REPORT

Lab Number:	L1100274
Client:	Haley & Aldrich, Inc. 465 Medford Street, Suite 2200 Charlestown, MA 02129-1400
ATTN:	Cole Worthy
Phone:	(617) 886-7341
Project Name:	FORMER ENERGY INTERNATIONAL
Project Number:	06318-502
Report Date:	01/13/11

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NY NELAC (11148), CT (PH-0574), NH (2003), NJ (MA935), RI (LAO00065), ME (MA0086), PA (Registration #68-03671), USDA (Permit #S-72578), US Army Corps of Engineers, Naval FESC.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: FORMER ENERGY INTERNATIONAL
Project Number: 06318-502

Lab Number: L1100274
Report Date: 01/13/11

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1100274-01	HA103(OW)	Not Specified	01/06/11 09:45

Project Name: FORMER ENERGY INTERNATIONAL

Lab Number: L1100274

Project Number: 06318-502

Report Date: 01/13/11

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	YES
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES
A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	NO
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	NO
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	NO
For any questions answered "No", please refer to the case narrative section on the following page(s).		

Please note that sample matrix information is located in the Sample Results section of this report.



Project Name: FORMER ENERGY INTERNATIONAL
Project Number: 06318-502

Lab Number: L1100274
Report Date: 01/13/11

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

For additional information, please contact Client Services at 800-624-9220.

MCP Related Narratives

Sample Receipt

The samples were Field Filtered for Dissolved Metals only.

Volatile Organics

In reference to question G:

One or more of the target analytes did not achieve the requested CAM reporting limits.

In reference to question H:

The initial calibration, associated with L1100274-01, did not meet the method required minimum response factor for 4-Methyl-2-pentanone (0.0921) and 1,4-Dioxane (0.00185); and utilized a quadratic fit for Chloroethane and Acetone.

The continuing calibration standard, associated with L1100274-01, is outside the acceptance criteria for

Project Name: FORMER ENERGY INTERNATIONAL
Project Number: 06318-502

Lab Number: L1100274
Report Date: 01/13/11

Case Narrative (continued)

several compounds; however, it is within overall method allowances. A copy of the continuing calibration standard is included as an addendum to this report.

EPH

In reference to question H:

The WG450898-2/-3 LCS/LCSD RPD, associated with L1100274-01, is above the acceptance criteria for Triacontane (C30) (65%); however, the individual LCS/LCSD recoveries are within method limits.

In reference to question I:

All samples were analyzed for a subset of MCP compounds per the Chain of Custody.

PCB

In reference to question H:

The surrogate recovery for the WG450894-1 Method Blank, associated with L1100274-01, is outside the individual acceptance criteria for Decachlorobiphenyl (153%), but within the overall method allowances. The results of the original analysis are reported; however, all associated compounds are considered to have a potential bias.

The WG450894-2 LCS recovery, associated with L1100274-01, was above the acceptance criteria for Aroclor 1260 (164%); however, the associated sample was non-detect for this target compound. The results of the original analysis are reported. In addition, the associated WG450894-2/-3 LCS/LCSD RPD is above the acceptance criteria for Aroclor 1260 (29%).

The WG450894-2/-3 LCS/LCSD RPD, associated with L1100274-01, is above the acceptance criteria for Aroclor 1016 (31%); however, the individual LCS/LCSD recoveries are within method limits.

The surrogate recoveries for WG450894-2 LCS, associated with L1100274-01, are above the acceptance criteria for Decachlorobiphenyl (191%/184%).

Dissolved Metals

L1100274-01 has elevated detection limits for Antimony and Thallium due to the dilutions required by the high concentrations of non-target analytes.

Project Name: FORMER ENERGY INTERNATIONAL
Project Number: 06318-502

Lab Number: L1100274
Report Date: 01/13/11

Case Narrative (continued)

In reference to question G:

L1100274-01: One or more of the target analytes did not achieve the requested CAM reporting limits.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Elizabeth Simmons

Title: Technical Director/Representative

Date: 01/13/11

ORGANICS

VOLATILES

Project Name: FORMER ENERGY INTERNATIONAL**Lab Number:** L1100274**Project Number:** 06318-502**Report Date:** 01/13/11**SAMPLE RESULTS**

Lab ID: L1100274-01
Client ID: HA103(OW)
Sample Location: Not Specified
Matrix: Water
Analytical Method: 97,8260B
Analytical Date: 01/10/11 11:27
Analyst: MM

Date Collected: 01/06/11 09:45
Date Received: 01/06/11
Field Prep: See Narrative

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	1.0	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1

Project Name: FORMER ENERGY INTERNATIONAL**Lab Number:** L1100274**Project Number:** 06318-502**Report Date:** 01/13/11**SAMPLE RESULTS****Lab ID:** L1100274-01**Date Collected:** 01/06/11 09:45**Client ID:** HA103(OW)**Date Received:** 01/06/11**Sample Location:** Not Specified**Field Prep:** See Narrative

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	15		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
2-Butanone	ND		ug/l	5.0	--	1
4-Methyl-2-pentanone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	5.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Ethyl ether	ND		ug/l	2.0	--	1

Project Name: FORMER ENERGY INTERNATIONAL**Lab Number:** L1100274**Project Number:** 06318-502**Report Date:** 01/13/11**SAMPLE RESULTS**

Lab ID: L1100274-01

Date Collected: 01/06/11 09:45

Client ID: HA103(OW)

Date Received: 01/06/11

Sample Location: Not Specified

Field Prep: See Narrative

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Isopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	92		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	108		70-130

Project Name: FORMER ENERGY INTERNATIONAL

Lab Number: L1100274

Project Number: 06318-502

Report Date: 01/13/11

Method Blank Analysis Batch Quality Control

Analytical Method: 97,8260B
 Analytical Date: 01/10/11 09:50
 Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01 Batch: WG451091-3					
Methylene chloride	ND		ug/l	2.0	--
1,1-Dichloroethane	ND		ug/l	1.0	--
Chloroform	ND		ug/l	1.0	--
Carbon tetrachloride	ND		ug/l	1.0	--
1,2-Dichloropropane	ND		ug/l	1.0	--
Dibromochloromethane	ND		ug/l	1.0	--
1,1,2-Trichloroethane	ND		ug/l	1.0	--
Tetrachloroethene	ND		ug/l	1.0	--
Chlorobenzene	ND		ug/l	1.0	--
Trichlorofluoromethane	ND		ug/l	2.0	--
1,2-Dichloroethane	ND		ug/l	1.0	--
1,1,1-Trichloroethane	ND		ug/l	1.0	--
Bromodichloromethane	ND		ug/l	1.0	--
trans-1,3-Dichloropropene	ND		ug/l	0.50	--
cis-1,3-Dichloropropene	ND		ug/l	0.50	--
1,1-Dichloropropene	ND		ug/l	2.0	--
Bromoform	ND		ug/l	2.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--
Benzene	ND		ug/l	1.0	--
Toluene	ND		ug/l	1.0	--
Ethylbenzene	ND		ug/l	1.0	--
Chloromethane	ND		ug/l	2.0	--
Bromomethane	ND		ug/l	2.0	--
Vinyl chloride	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	2.0	--
1,1-Dichloroethene	ND		ug/l	1.0	--
trans-1,2-Dichloroethene	ND		ug/l	1.0	--
Trichloroethene	ND		ug/l	1.0	--
1,2-Dichlorobenzene	ND		ug/l	1.0	--
1,3-Dichlorobenzene	ND		ug/l	1.0	--
1,4-Dichlorobenzene	ND		ug/l	1.0	--

Project Name: FORMER ENERGY INTERNATIONAL

Lab Number: L1100274

Project Number: 06318-502

Report Date: 01/13/11

Method Blank Analysis Batch Quality Control

Analytical Method: 97,8260B
 Analytical Date: 01/10/11 09:50
 Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01 Batch: WG451091-3					
Methyl tert butyl ether	ND		ug/l	2.0	--
p/m-Xylene	ND		ug/l	2.0	--
o-Xylene	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	1.0	--
Dibromomethane	ND		ug/l	2.0	--
1,2,3-Trichloropropane	ND		ug/l	2.0	--
Styrene	ND		ug/l	1.0	--
Dichlorodifluoromethane	ND		ug/l	2.0	--
Acetone	ND		ug/l	5.0	--
Carbon disulfide	ND		ug/l	2.0	--
2-Butanone	ND		ug/l	5.0	--
4-Methyl-2-pentanone	ND		ug/l	5.0	--
2-Hexanone	ND		ug/l	5.0	--
Bromochloromethane	ND		ug/l	2.0	--
Tetrahydrofuran	ND		ug/l	5.0	--
2,2-Dichloropropane	ND		ug/l	2.0	--
1,2-Dibromoethane	ND		ug/l	2.0	--
1,3-Dichloropropane	ND		ug/l	2.0	--
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--
Bromobenzene	ND		ug/l	2.0	--
n-Butylbenzene	ND		ug/l	2.0	--
sec-Butylbenzene	ND		ug/l	2.0	--
tert-Butylbenzene	ND		ug/l	2.0	--
o-Chlorotoluene	ND		ug/l	2.0	--
p-Chlorotoluene	ND		ug/l	2.0	--
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--
Hexachlorobutadiene	ND		ug/l	0.60	--
Isopropylbenzene	ND		ug/l	2.0	--
p-Isopropyltoluene	ND		ug/l	2.0	--
Naphthalene	ND		ug/l	2.0	--
n-Propylbenzene	ND		ug/l	2.0	--

Project Name: FORMER ENERGY INTERNATIONAL**Lab Number:** L1100274**Project Number:** 06318-502**Report Date:** 01/13/11

Method Blank Analysis Batch Quality Control

Analytical Method: 97,8260B
 Analytical Date: 01/10/11 09:50
 Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01 Batch: WG451091-3					
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--
Ethyl ether	ND		ug/l	2.0	--
Isopropyl Ether	ND		ug/l	2.0	--
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--
1,4-Dioxane	ND		ug/l	250	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	92		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	107		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER ENERGY INTERNATIONAL
Project Number: 06318-502

Lab Number: L1100274
Report Date: 01/13/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG451091-1 WG451091-2								
Methylene chloride	96		95		70-130	1		20
1,1-Dichloroethane	91		91		70-130	0		20
Chloroform	95		96		70-130	1		20
Carbon tetrachloride	116		118		70-130	2		20
1,2-Dichloropropane	87		87		70-130	0		20
Dibromochloromethane	105		102		70-130	3		20
1,1,2-Trichloroethane	91		89		70-130	2		20
Tetrachloroethene	108		110		70-130	2		20
Chlorobenzene	95		95		70-130	0		20
Trichlorofluoromethane	113		115		70-130	2		20
1,2-Dichloroethane	91		91		70-130	0		20
1,1,1-Trichloroethane	104		106		70-130	2		20
Bromodichloromethane	100		99		70-130	1		20
trans-1,3-Dichloropropene	115		113		70-130	2		20
cis-1,3-Dichloropropene	98		100		70-130	2		20
1,1-Dichloropropene	96		98		70-130	2		20
Bromoform	122		119		70-130	2		20
1,1,2,2-Tetrachloroethane	84		83		70-130	1		20
Benzene	95		96		70-130	1		20
Toluene	93		93		70-130	0		20
Ethylbenzene	99		98		70-130	1		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER ENERGY INTERNATIONAL

Project Number: 06318-502

Lab Number: L1100274

Report Date: 01/13/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG451091-1 WG451091-2								
Chloromethane	85		86		70-130	1		20
Bromomethane	92		91		70-130	1		20
Vinyl chloride	80		82		70-130	2		20
Chloroethane	98		103		70-130	5		20
1,1-Dichloroethene	104		106		70-130	2		20
trans-1,2-Dichloroethene	94		96		70-130	2		20
Trichloroethene	99		99		70-130	0		20
1,2-Dichlorobenzene	96		96		70-130	0		20
1,3-Dichlorobenzene	98		98		70-130	0		20
1,4-Dichlorobenzene	96		96		70-130	0		20
Methyl tert butyl ether	91		90		70-130	1		20
p/m-Xylene	102		102		70-130	0		20
o-Xylene	101		100		70-130	1		20
cis-1,2-Dichloroethene	96		97		70-130	1		20
Dibromomethane	94		94		70-130	0		20
1,2,3-Trichloropropane	85		84		70-130	1		20
Styrene	99		99		70-130	0		20
Dichlorodifluoromethane	92		91		70-130	1		20
Acetone	83		83		70-130	0		20
Carbon disulfide	92		93		70-130	1		20
2-Butanone	96		94		70-130	2		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER ENERGY INTERNATIONAL
Project Number: 06318-502

Lab Number: L1100274
Report Date: 01/13/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG451091-1 WG451091-2								
4-Methyl-2-pentanone	96		93		70-130	3		20
2-Hexanone	89		85		70-130	5		20
Bromochloromethane	99		102		70-130	3		20
Tetrahydrofuran	79		80		70-130	1		20
2,2-Dichloropropane	115		116		70-130	1		20
1,2-Dibromoethane	96		95		70-130	1		20
1,3-Dichloropropane	92		88		70-130	4		20
1,1,1,2-Tetrachloroethane	113		112		70-130	1		20
Bromobenzene	99		99		70-130	0		20
n-Butylbenzene	90		91		70-130	1		20
sec-Butylbenzene	94		93		70-130	1		20
tert-Butylbenzene	95		95		70-130	0		20
o-Chlorotoluene	91		91		70-130	0		20
p-Chlorotoluene	88		100		70-130	13		20
1,2-Dibromo-3-chloropropane	100		94		70-130	6		20
Hexachlorobutadiene	105		105		70-130	0		20
Isopropylbenzene	101		100		70-130	1		20
p-Isopropyltoluene	99		100		70-130	1		20
Naphthalene	76		76		70-130	0		20
n-Propylbenzene	93		94		70-130	1		20
1,2,3-Trichlorobenzene	91		90		70-130	1		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER ENERGY INTERNATIONAL

Project Number: 06318-502

Lab Number: L1100274

Report Date: 01/13/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG451091-1 WG451091-2								
1,2,4-Trichlorobenzene	93		93		70-130	0		20
1,3,5-Trimethylbenzene	92		93		70-130	1		20
1,2,4-Trimethylbenzene	93		93		70-130	0		20
Ethyl ether	105		106		70-130	1		20
Isopropyl Ether	88		88		70-130	0		20
Ethyl-Tert-Butyl-Ether	94		93		70-130	1		20
Tertiary-Amyl Methyl Ether	97		98		70-130	1		20
1,4-Dioxane	112		111		70-130	1		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	92		89		70-130
Toluene-d8	97		97		70-130
4-Bromofluorobenzene	93		93		70-130
Dibromofluoromethane	99		97		70-130

PETROLEUM HYDROCARBONS

Project Name: FORMER ENERGY INTERNATIONAL**Lab Number:** L1100274**Project Number:** 06318-502**Report Date:** 01/13/11**SAMPLE RESULTS**

Lab ID: L1100274-01
Client ID: HA103(OW)
Sample Location: Not Specified
Matrix: Water
Analytical Method: 98,EPH-04-1.1
Analytical Date: 01/11/11 21:18
Analyst: NH

Date Collected: 01/06/11 09:45
Date Received: 01/06/11
Field Prep: See Narrative
Extraction Method: EPA 3510C
Extraction Date: 01/10/11 08:03
Cleanup Method1: EPH-04-1
Cleanup Date1: 01/10/11

Quality Control Information

Condition of sample received:	Satisfactory
Aqueous Preservative:	Laboratory Provided Preserved Container
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Extractable Petroleum Hydrocarbons - Westborough Lab						
C9-C18 Aliphatics	ND		ug/l	103	--	1
C19-C36 Aliphatics	ND		ug/l	103	--	1
C11-C22 Aromatics	ND		ug/l	103	--	1
C11-C22 Aromatics, Adjusted	ND		ug/l	103	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	64		40-140
o-Terphenyl	71		40-140
2-Fluorobiphenyl	59		40-140
2-Bromonaphthalene	61		40-140

Project Name: FORMER ENERGY INTERNATIONAL**Lab Number:** L1100274**Project Number:** 06318-502**Report Date:** 01/13/11

Method Blank Analysis Batch Quality Control

Analytical Method: 98,EPH-04-1.1

Analytical Date: 01/11/11 14:55

Analyst: NH

Extraction Method: EPA 3510C

Extraction Date: 01/10/11 08:03

Cleanup Method1: EPH-04-1

Cleanup Date1: 01/10/11

Parameter	Result	Qualifier	Units	RL	MDL
Extractable Petroleum Hydrocarbons - Westborough Lab for sample(s): 01 Batch: WG450898-1					
C9-C18 Aliphatics	ND		ug/l	100	--
C19-C36 Aliphatics	ND		ug/l	100	--
C11-C22 Aromatics	ND		ug/l	100	--
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	72		40-140
o-Terphenyl	77		40-140
2-Fluorobiphenyl	70		40-140
2-Bromonaphthalene	71		40-140

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER ENERGY INTERNATIONAL

Project Number: 06318-502

Lab Number: L1100274

Report Date: 01/13/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Extractable Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 01 Batch: WG450898-2 WG450898-3								
C9-C18 Aliphatics	66		62		40-140	6		25
C19-C36 Aliphatics	88		84		40-140	5		25
C11-C22 Aromatics	78		91		40-140	15		25
Naphthalene	77		69		40-140	11		25
2-Methylnaphthalene	80		79		40-140	1		25
Acenaphthylene	86		92		40-140	7		25
Acenaphthene	77		85		40-140	10		25
Fluorene	72		86		40-140	18		25
Phenanthrene	81		94		40-140	15		25
Anthracene	80		90		40-140	12		25
Fluoranthene	74		91		40-140	21		25
Pyrene	79		94		40-140	17		25
Benzo(a)anthracene	71		87		40-140	20		25
Chrysene	71		89		40-140	23		25
Benzo(b)fluoranthene	71		86		40-140	19		25
Benzo(k)fluoranthene	70		86		40-140	21		25
Benzo(a)pyrene	70		86		40-140	21		25
Indeno(1,2,3-cd)Pyrene	71		87		40-140	20		25
Dibenzo(a,h)anthracene	69		85		40-140	21		25
Benzo(ghi)perylene	70		87		40-140	22		25
Nonane (C9)	57		48		30-140	17		25

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER ENERGY INTERNATIONAL

Project Number: 06318-502

Lab Number: L1100274

Report Date: 01/13/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Extractable Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 01 Batch: WG450898-2 WG450898-3								
Decane (C10)	65		55		40-140	17		25
Dodecane (C12)	69		61		40-140	12		25
Tetradecane (C14)	73		72		40-140	1		25
Hexadecane (C16)	79		81		40-140	3		25
Octadecane (C18)	86		87		40-140	1		25
Nonadecane (C19)	88		90		40-140	2		25
Eicosane (C20)	87		90		40-140	3		25
Docosane (C22)	88		91		40-140	3		25
Tetracosane (C24)	88		93		40-140	6		25
Hexacosane (C26)	89		92		40-140	3		25
Octacosane (C28)	88		90		40-140	2		25
Triacontane (C30)	90		46		40-140	65	Q	25
Hexatriacontane (C36)	91		92		40-140	1		25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Chloro-Octadecane	82		80		40-140
o-Terphenyl	74		89		40-140
2-Fluorobiphenyl	69		71		40-140
2-Bromonaphthalene	74		75		40-140
% Naphthalene Breakthrough	0		0		
% 2-Methylnaphthalene Breakthrough	0		0		

PCBS

Project Name: FORMER ENERGY INTERNATIONAL**Lab Number:** L1100274**Project Number:** 06318-502**Report Date:** 01/13/11**SAMPLE RESULTS**

Lab ID: L1100274-01
Client ID: HA103(OW)
Sample Location: Not Specified
Matrix: Water
Analytical Method: 97,8082
Analytical Date: 01/11/11 09:05
Analyst: KB

Date Collected: 01/06/11 09:45
Date Received: 01/06/11
Field Prep: See Narrative
Extraction Method: EPA 3510C
Extraction Date: 01/10/11 07:58
Cleanup Method1: EPA 3665A
Cleanup Date1: 01/11/11
Cleanup Method2: EPA 3660B
Cleanup Date2: 01/11/11

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/l	0.250	--	1
Aroclor 1221	ND		ug/l	0.250	--	1
Aroclor 1232	ND		ug/l	0.250	--	1
Aroclor 1242	ND		ug/l	0.250	--	1
Aroclor 1248	ND		ug/l	0.250	--	1
Aroclor 1254	ND		ug/l	0.250	--	1
Aroclor 1260	ND		ug/l	0.250	--	1
Aroclor 1262	ND		ug/l	0.250	--	1
Aroclor 1268	ND		ug/l	0.250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	82		30-150	A
Decachlorobiphenyl	144		30-150	A
2,4,5,6-Tetrachloro-m-xylene	79		30-150	B
Decachlorobiphenyl	139		30-150	B

Project Name: FORMER ENERGY INTERNATIONAL

Lab Number: L1100274

Project Number: 06318-502

Report Date: 01/13/11

Method Blank Analysis Batch Quality Control

Analytical Method: 97,8082
 Analytical Date: 01/11/11 10:46
 Analyst: KB

Extraction Method: EPA 3510C
 Extraction Date: 01/10/11 07:58
 Cleanup Method1: EPA 3665A
 Cleanup Date1: 01/11/11
 Cleanup Method2: EPA 3660B
 Cleanup Date2: 01/11/11

Parameter	Result	Qualifier	Units	RL	MDL
MCP Polychlorinated Biphenyls - Westborough Lab for sample(s): 01 Batch: WG450894-1					
Aroclor 1016	ND		ug/l	0.250	--
Aroclor 1221	ND		ug/l	0.250	--
Aroclor 1232	ND		ug/l	0.250	--
Aroclor 1242	ND		ug/l	0.250	--
Aroclor 1248	ND		ug/l	0.250	--
Aroclor 1254	ND		ug/l	0.250	--
Aroclor 1260	ND		ug/l	0.250	--
Aroclor 1262	ND		ug/l	0.250	--
Aroclor 1268	ND		ug/l	0.250	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	61		30-150	A
Decachlorobiphenyl	112		30-150	A
2,4,5,6-Tetrachloro-m-xylene	71		30-150	B
Decachlorobiphenyl	153	Q	30-150	B

Lab Control Sample Analysis**Batch Quality Control****Project Name:** FORMER ENERGY INTERNATIONAL**Lab Number:** L1100274**Project Number:** 06318-502**Report Date:** 01/13/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Polychlorinated Biphenyls - Westborough Lab Associated sample(s): 01 Batch: WG450894-2 WG450894-3								
Aroclor 1016	133		97		40-140	31	Q	20
Aroclor 1260	164	Q	123		40-140	29	Q	20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	99		76		30-150	A
Decachlorobiphenyl	191	Q	105		30-150	A
2,4,5,6-Tetrachloro-m-xylene	94		70		30-150	B
Decachlorobiphenyl	184	Q	104		30-150	B

METALS

Project Name: FORMER ENERGY INTERNATIONAL**Lab Number:** L1100274**Project Number:** 06318-502**Report Date:** 01/13/11**SAMPLE RESULTS****Lab ID:** L1100274-01**Date Collected:** 01/06/11 09:45**Client ID:** HA103(OW)**Date Received:** 01/06/11**Sample Location:** Not Specified**Field Prep:** See Narrative**Matrix:** Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Dissolved Metals - Westborough Lab											
Antimony, Dissolved	0.0020		mg/l	0.0020	--	4	01/07/11 12:20	01/10/11 20:45	EPA 3005A	97,6020A	BM
Arsenic, Dissolved	ND		mg/l	0.005	--	1	01/07/11 09:45	01/13/11 09:31	EPA 3005A	97,6010B	AI
Barium, Dissolved	0.293		mg/l	0.010	--	1	01/07/11 09:45	01/13/11 09:31	EPA 3005A	97,6010B	AI
Beryllium, Dissolved	ND		mg/l	0.004	--	1	01/07/11 09:45	01/13/11 09:31	EPA 3005A	97,6010B	AI
Cadmium, Dissolved	ND		mg/l	0.004	--	1	01/07/11 09:45	01/13/11 09:31	EPA 3005A	97,6010B	AI
Chromium, Dissolved	ND		mg/l	0.01	--	1	01/07/11 09:45	01/13/11 09:31	EPA 3005A	97,6010B	AI
Lead, Dissolved	ND		mg/l	0.010	--	1	01/07/11 09:45	01/13/11 09:31	EPA 3005A	97,6010B	AI
Mercury, Dissolved	ND		mg/l	0.0002	--	1	01/07/11 11:00	01/07/11 16:17	EPA 7470A	97,7470A	KR
Nickel, Dissolved	ND		mg/l	0.025	--	1	01/07/11 09:45	01/13/11 09:31	EPA 3005A	97,6010B	AI
Selenium, Dissolved	ND		mg/l	0.010	--	1	01/07/11 09:45	01/13/11 09:31	EPA 3005A	97,6010B	AI
Silver, Dissolved	ND		mg/l	0.007	--	1	01/07/11 09:45	01/13/11 09:31	EPA 3005A	97,6010B	AI
Thallium, Dissolved	ND		mg/l	0.0020	--	4	01/07/11 12:20	01/10/11 20:45	EPA 3005A	97,6020A	BM
Vanadium, Dissolved	ND		mg/l	0.010	--	1	01/07/11 09:45	01/13/11 09:31	EPA 3005A	97,6010B	AI
Zinc, Dissolved	ND		mg/l	0.050	--	1	01/07/11 09:45	01/13/11 09:31	EPA 3005A	97,6010B	AI



Project Name: FORMER ENERGY INTERNATIONAL

Lab Number: L1100274

Project Number: 06318-502

Report Date: 01/13/11

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Dissolved Metals - Westborough Lab for sample(s): 01 Batch: WG450731-1										
Mercury, Dissolved	ND		mg/l	0.0002	--	1	01/07/11 11:00	01/07/11 16:11	97,7470A	KR

Prep Information

Digestion Method: EPA 7470A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Dissolved Metals - Westborough Lab for sample(s): 01 Batch: WG450748-1										
Arsenic, Dissolved	ND		mg/l	0.005	--	1	01/07/11 09:45	01/13/11 09:22	97,6010B	AI
Barium, Dissolved	ND		mg/l	0.010	--	1	01/07/11 09:45	01/13/11 09:22	97,6010B	AI
Beryllium, Dissolved	ND		mg/l	0.004	--	1	01/07/11 09:45	01/13/11 09:22	97,6010B	AI
Cadmium, Dissolved	ND		mg/l	0.004	--	1	01/07/11 09:45	01/13/11 09:22	97,6010B	AI
Chromium, Dissolved	ND		mg/l	0.01	--	1	01/07/11 09:45	01/13/11 09:22	97,6010B	AI
Lead, Dissolved	ND		mg/l	0.010	--	1	01/07/11 09:45	01/13/11 09:22	97,6010B	AI
Nickel, Dissolved	ND		mg/l	0.025	--	1	01/07/11 09:45	01/13/11 09:22	97,6010B	AI
Selenium, Dissolved	ND		mg/l	0.010	--	1	01/07/11 09:45	01/13/11 09:22	97,6010B	AI
Silver, Dissolved	ND		mg/l	0.007	--	1	01/07/11 09:45	01/13/11 09:22	97,6010B	AI
Vanadium, Dissolved	ND		mg/l	0.010	--	1	01/07/11 09:45	01/13/11 09:22	97,6010B	AI
Zinc, Dissolved	ND		mg/l	0.050	--	1	01/07/11 09:45	01/13/11 09:22	97,6010B	AI

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Dissolved Metals - Westborough Lab for sample(s): 01 Batch: WG450760-1										
Antimony, Dissolved	ND		mg/l	0.0005	--	1	01/07/11 12:20	01/10/11 19:20	97,6020A	BM
Thallium, Dissolved	ND		mg/l	0.0005	--	1	01/07/11 12:20	01/10/11 19:20	97,6020A	BM

Project Name: FORMER ENERGY INTERNATIONAL

Lab Number: L1100274

Project Number: 06318-502

Report Date: 01/13/11

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER ENERGY INTERNATIONAL

Project Number: 06318-502

Lab Number: L1100274

Report Date: 01/13/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Dissolved Metals - Westborough Lab Associated sample(s): 01 Batch: WG450731-2 WG450731-3								
Mercury, Dissolved	99		103		80-120	4		20
MCP Dissolved Metals - Westborough Lab Associated sample(s): 01 Batch: WG450748-2 WG450748-3								
Arsenic, Dissolved	105		106		80-120	1		20
Barium, Dissolved	96		96		80-120	0		20
Beryllium, Dissolved	98		99		80-120	1		20
Cadmium, Dissolved	96		98		80-120	2		20
Chromium, Dissolved	95		95		80-120	0		20
Lead, Dissolved	101		102		80-120	1		20
Nickel, Dissolved	96		98		80-120	2		20
Selenium, Dissolved	108		110		80-120	2		20
Silver, Dissolved	98		100		80-120	2		20
Vanadium, Dissolved	98		98		80-120	0		20
Zinc, Dissolved	97		99		80-120	2		20
MCP Dissolved Metals - Westborough Lab Associated sample(s): 01 Batch: WG450760-2 WG450760-3								
Antimony, Dissolved	99		95		80-120	4		20
Thallium, Dissolved	94		93		80-120	1		20

Matrix Spike Analysis **Batch Quality Control**

Project Name: FORMER ENERGY INTERNATIONAL
Project Number: 06318-502

Lab Number: L1100274
Report Date: 01/13/11

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
MCP Dissolved Metals - Westborough Lab Associated sample(s): 01				QC Batch ID: WG450731-4		QC Sample: L1100274-01		Client ID: HA103(OW)				
Mercury, Dissolved	ND	0.001	0.0010	105		-	-		75-125	-		20
MCP Dissolved Metals - Westborough Lab Associated sample(s): 01				QC Batch ID: WG450748-6		QC Sample: L1100274-01		Client ID: HA103(OW)				
Arsenic, Dissolved	ND	0.12	0.133	111		-	-		75-125	-		20
Barium, Dissolved	0.293	2	2.22	96		-	-		75-125	-		20
Beryllium, Dissolved	ND	0.05	0.049	98		-	-		75-125	-		20
Cadmium, Dissolved	ND	0.51	0.475	93		-	-		75-125	-		20
Chromium, Dissolved	ND	0.2	0.19	95		-	-		75-125	-		20
Lead, Dissolved	ND	0.51	0.468	92		-	-		75-125	-		20
Nickel, Dissolved	ND	0.5	0.450	90		-	-		75-125	-		20
Selenium, Dissolved	ND	0.12	0.131	109		-	-		75-125	-		20
Silver, Dissolved	ND	0.05	0.052	104		-	-		75-125	-		20
Vanadium, Dissolved	ND	0.5	0.496	99		-	-		75-125	-		20
Zinc, Dissolved	ND	0.5	0.495	99		-	-		75-125	-		20
MCP Dissolved Metals - Westborough Lab Associated sample(s): 01				QC Batch ID: WG450760-4		QC Sample: L1100274-01		Client ID: HA103(OW)				
Antimony, Dissolved	0.0020	0.5	0.4780	95		-	-		75-125	-		20
Thallium, Dissolved	ND	0.12	0.1054	88		-	-		75-125	-		20

Project Name: FORMER ENERGY INTERNATIONAL**Project Number:** 06318-502**Lab Number:** L1100274**Report Date:** 01/13/11**Sample Receipt and Container Information**

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA**Cooler Information Custody Seal****Cooler**

A Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1100274-01A	Vial HCl preserved	A	N/A	3	Y	Absent	MCP-8260-10(14)
L1100274-01B	Vial HCl preserved	A	N/A	3	Y	Absent	MCP-8260-10(14)
L1100274-01C	Amber 1000ml HCl preserved	A	<2	3	Y	Absent	EPH-10(14)
L1100274-01D	Amber 1000ml HCl preserved	A	<2	3	Y	Absent	EPH-10(14)
L1100274-01E	Amber 1000ml unpreserved	A	7	3	Y	Absent	MCP-8082-10(365)
L1100274-01F	Amber 1000ml unpreserved	A	7	3	Y	Absent	MCP-8082-10(365)
L1100274-01G	Plastic 500ml HNO3 preserved	A	<2	3	Y	Absent	MCP-CD-6010S-10(180),MCP-7470S-10(28),MCP-AG-6010S-10(180),MCP-SB-6020S-10(180),MCP-ZN-6010S-10(180),MCP-AS-6010S-10(180),MCP-CR-6010S-10(180),MCP-TL-6020S-10(180),MCP-BA-6010S-10(180),MCP-BE-6010S-10(180),MCP-PB-6010S-10(180),MCP-NI-6010S-10(180),MCP-SE-6010S-10(180),MCP-V-6010S-10(180)

*Values in parentheses indicate holding time in days

Project Name: FORMER ENERGY INTERNATIONAL
Project Number: 06318-502

Lab Number: L1100274
Report Date: 01/13/11

GLOSSARY

Acronyms

EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NI	- Not Ignitable.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank.
D	- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
E	- Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
H	- The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
I	- The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported due to obvious interference.
P	- The RPD between the results for the two columns exceeds the method-specified criteria.
Q	- The quality control sample exceeds the associated acceptance criteria. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
R	- Analytical results are from sample re-analysis.

Report Format: Data Usability Report



Project Name: FORMER ENERGY INTERNATIONAL
Project Number: 06318-502

Lab Number: L1100274
Report Date: 01/13/11

Data Qualifiers

RE - Analytical results are from sample re-extraction.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the reporting limit (RL) for the sample.

Project Name: FORMER ENERGY INTERNATIONAL
Project Number: 06318-502

Lab Number: L1100274
Report Date: 01/13/11

REFERENCES

- 97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.
- 98 Method for the Determination of Extractable Petroleum Hydrocarbons (EPH), MassDEP, May 2004, Revision 1.1 with QC Requirements & Performance Standards for the Analysis of EPH under the Massachusetts Contingency Plan, WSC-CAM-IVB, July 2010.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certificate/Approval Program Summary

Last revised July 19, 2010 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0574. **NELAP Accredited Solid Waste/Soil.**

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP), Ethylene Dibromide (EDB), 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223 P/A), E. Coli. – Colilert (SM9223 P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D))

Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E).)

Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Volatile Organics, Acid Extractables (Phenols), 3,3'-Dichlorobenzidine, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Maine Department of Human Services Certificate/Lab ID: 2009024.

Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 300.0, 353.2, SM2130B, 2320B, 4500CI-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, Lachat 10-107-06-1-B, SM2320B, 2340B, 2510B, 2540C, 2540D, 426C, 4500CI-D, 4500CI-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NH3-H, 4500NO3-F, 4500P-B.5, 4500P-E, 5210B, 5220D, 5310C, EPA 200.7, 200.8, 245.1. Organic Parameters: 608, 624, ME DRO, ME GRO, MA EPH, MA VPH.)

Solid Waste/Soil (Organic Parameters: ME DRO, ME GRO, MA EPH, MA VPH.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.

Drinking Water

Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl)

(EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate)

353.2 for: Nitrate-N, Nitrite-N; SM4500NO3-F, 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, 2320B, SM2540C, SM4500H-B.

Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics)

(504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), 314.0, 332.

Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; MF-SM9222D

Non-Potable Water

Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn)

(EPA 200.7 for: Al,Sb,As,Be,Cd,Cr,Co,Cu,Fe,Pb,Mn,Mo,Ni,Se,Ag,Sr,Ti,Tl, V,Zn,Ca,Mg,Na,K)

245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2540B, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-B,C-Titr, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420, SM4500-CN-CE, SM2540D.

Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics)

(608 for: Chlordane, Aldrin, Dieldrin, DDD, DDE, DDT, Heptachlor, Heptachlor Epoxide, PCBs-Water), EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables, 600/4-81-045-PCB-Oil

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. *NELAP Accredited.*

Drinking Water (Inorganic Parameters: SM6215B, 9222B, 9223B Colilert, EPA 200.7, 200.8, 245.2, 120.1, 300.0, 314.0, SM4500CN-E, 4500H+B, 4500NO₃-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 331.0. *Organic Parameters:* 504.1, 524.2, SM6251B.)

Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 351.1, 353.2, 420.1, 1664A, SW-846 9010, 9030, 9040B, SM426C, SM2310B, 2540B, 2540D, 4500H+B, 4500NH₃-H, 4500NH₃-E, 4500NO₂-B, 4500P-E, 4500-S₂-D, 5210B, 2320B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-117-07-1-B, LACHAT 10-107-06-1-B, LACHAT 10-107-04-1-C, LACHAT 10-107-04-1-J, LACHAT 10-117-07-1-A, SM4500CL-E, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. *Organic Parameters:* SW-846 3005A, 3015A, 3510C, 5030B, 8021B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 7.3.3.2, 7.3.4.2, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040, 9045C, 9050C, 1311, 3005A, 3050B, 3051A. *Organic Parameters:* SW-846 3540C, 3545, 3580A, 5030B, 5035, 8021B, 8260B, 8270C, 8330, 8151A, 8082, 8081A.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. *NELAP Accredited.*

Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500NO₃-F, 4500F-C, EPA 300.0, 200.7, 2540C, 2320B, 314.0, SM2120B, 2510B, 5310C, SM4500H-B, EPA 200.8, 245.2. *Organic Parameters:* 504.1, SM6251B, 524.2.)

Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500Cl-D, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO₃-F, 4500NO₂-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM4500P-B₅+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, SM9221CE, 9222D, 9221B, 9222B, 9215B, 2310B, 2320B, 4500NH₃-H, 4500-S₂ D, EPA 350.1, SM5210B, SW-846 3015, 6020, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, EPA 245.1, 245.2, SW-846 9040B, 3005A, EPA 6010B, 7196A, SW-846 9010B, 9030B. *Organic Parameters:* SW-846 8260B, 8270C, 3510C, EPA 608, 624, 625, SW-846 5030B, 8021B, 8081A, 8082, 8151A, 8330, NJ OQA-QAM-025 Rev.7.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 9040B, 3005A, 6010B, 7196A, 5030B, 9010B, 9030B, 1030, 1311, 3050B, 3051, 7471A, 9014, 9012A, 9045C, 9050A, 9065. *Organic Parameters:* SW-846 8021B, 8081A, 8082, 8151A, 8330, 8260B, 8270C, 1311, 1312, 3540C, 3545, 3550B, 3580A, 5035L, 5035H, NJ OQA-QAM-025 Rev.7.)

New York Department of Health Certificate/Lab ID: 11148. *NELAP Accredited.*

Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 314.0, 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500H-B, 4500NO₃-F, 2540C, EPA 120.1, SM 2510B. *Organic Parameters:* EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, LACHAT 10-117-07-1A or B, SM4500Cl-E, 4500F-C, SM15 426C, EPA 350.1, LACHAT 10-107-06-1-B, SM4500NH₃-H, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-041-C, SM4500-NO₃-F, 4500-NO₂-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, SM4500-CN-E LACHAT 10-204-00-1-A, EPA 9040B, SM4500-HB, EPA 1664A, SM5310C, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015. *Organic Parameters:* EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, EPA 3510C, 5030B, 9010B, 9030B.)

Solid & Hazardous Waste (Inorganic Parameters: 1010, 1030, SW-846 Ch 7 Sec 7.3, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. *Organic Parameters:* EPA 8260B, 8270C, 8081A, 8151A, 8330, 8082, 3540C, 3545, 3546, 3580, 5030B, 5035.)

North Carolina Department of the Environment and Natural Resources Certificate/Lab ID : 666. *Organic Parameters:* MA-EPH, MA-VPH.

Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-03671. *NELAP Accredited.*

Non-Potable Water (Organic Parameters: EPA 3510C, 5030B, 625, 624. 608, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1010, 1030, 1311, 3050B, 3051, 6010B, EPA 7.3.3.2, EPA 7.3.4.2, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065. *Organic Parameters:* 3540C, 3545, 3580A, 5035, 8021B, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Rhode Island Department of Health Certificate/Lab ID: LAO00065. *NELAP Accredited via NY-DOH.*

Refer to MA-DEP Certificate for Potable and Non-Potable Water.

Refer to NY-DOH Certificate for Potable and Non-Potable Water.

Texas Commission on Environmental Quality Certificate/Lab ID: T104704476-09-1. *NELAP Accredited.*

Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 376.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH₃-H, 4500NO₂B, 4500P-E, 4500 S²⁻ D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Department of Defense Certificate/Lab ID: L2217.

Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6020, 245.1, 245.2, 7470A, 9040B, 300.0, 9251, 9038, 350.1, 353.2, 351.1, 120.1, 9050A, 410.4, 9060, 1664, 420.1, LACHAT 10-107-06-1-B, SM 4500CN-E, 4500H-B, 4500CL-E, 4500F-BC, 4500SO₄-E, 426C, 4500NH₃-B, 4500NH₃-H, 4500NO₃-F, 4500NO₂-B, 4500Norg-C, 4500PE, 2510B, 5540C, 5220D, 5310C, 2540B, 2540C, 2540D, 510C, 4500S₂-AD, 3005A, 3015, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8330, 625, 8082, 8151A, 8081A, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 7471A, 9040B, 9045C, 9065, 420.1, 9012A, 6860, 1311, 1312, 3050B, 9030B, 3051, 9010B, 3540C, SM 510ABC, 4500CN-CE, 2540G, SW-846 7.3, Organic Parameters: EPA 8260B, 8270C, 8330, 8082, 8081A, 8151A, 3545, 3546, 3580, 5035, MassDEP EPH, MassDEP VPH.)

Analytes Not Accredited by NELAP

Certification is not available by NELAP for the following analytes: **EPA 8260B**: Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A**: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C**: Methyl naphthalene, Dimethyl naphthalene, Total Methyl naphthalenes, Total Dimethyl naphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625**: 4-Chloroaniline. **EPA 350.1** for Ammonia in a Soil matrix.

CHAIN OF CUSTODY RECORD

H&A FILE NO. 06318-502 LABORATORY Apple Analytical DELIVERY DATE 11/6/2010
PROJECT NAME Former Evening International Fuel Address TURNAROUND TIME 5 Standard
H&A CONTACT Cole W. Worthy CONTACT Weston W. Worthy PROJECT MANAGER Cole W. Worthy

Sample No.	Date	Time	Depth	Type	① VOA	② ABNs PAH only	③ MCP Metals	④ PCBs	⑤ VPH Full Suite C-ranges only	⑥ EPH Full Suite C-ranges only	TPH (specify)	TCLP (specify)	Reactivity Ignitability Corrosivity	Number of Containers	Comments (special instructions, precautions, additional method numbers, etc.)
HA103 (cont)	11/6/11	0945		H2O	X	X	X	X	X	X				7	Laboratory to use applicable DEP CAM methods, unless otherwise directed. ① use 8360 ② use methyl (Held) ③ PCBs ④ EPH - Carbon Surgen only
Retrieved by	Received by														Sampling Comments
Sign <u>Desmond Crawford</u> Print <u>Desmond Crawford</u> Firm <u>Haley & Aldrich</u> Date <u>11/6/11</u> Time <u>1500</u>	Sign <u>Desmond Crawford</u> Print <u>Desmond Crawford</u> Firm <u>Haley & Aldrich</u> Date <u>11/6/11</u> Time <u>1500</u>														
Retrieved by	Received by														
Sign <u>Desmond Crawford</u> Print <u>Desmond Crawford</u> Firm <u>Haley & Aldrich</u> Date <u>11/6/11</u> Time <u>1615</u>	Sign <u>Desmond Crawford</u> Print <u>Desmond Crawford</u> Firm <u>Haley & Aldrich</u> Date <u>11/6/11</u> Time <u>1615</u>														
Retrieved by	Received by														
Sign <u>Desmond Crawford</u> Print <u>Desmond Crawford</u> Firm <u>Haley & Aldrich</u> Date <u>11/6/11</u> Time <u>1735</u>	Sign <u>Desmond Crawford</u> Print <u>Desmond Crawford</u> Firm <u>Haley & Aldrich</u> Date <u>11/6/11</u> Time <u>1735</u>														
Retrieved by	Received by														

Presumptive Certainty Data Package (Laboratory to use applicable DEP CAM methods)

If Presumptive Certainty Data Package is needed, initial all sections:

The required minimum field QC samples, as designated in BWSC CAM-VI have been or will be collected, as appropriate, to meet the requirements of Presumptive Certainty.

Matrix Spike (MS) samples for MCP Metals and/or Cyanide are included and identified herein.

This Chain of Custody Record (specify) X includes X does not include samples defined as Drinking Water Samples.

If this Chain of Custody Record identifies samples defined as Drinking Water Samples, Trip Blanks and Field Duplicates are included and identified and analysis of TICs are required, as appropriate. Laboratory should (specify if applicable) analyze hold for contingency testing the Drinking Water Field Duplicate and Drinking Water Trip Blank samples.

Required Reporting Limits and Data Quality Objectives

- ☐ RC-S1 ☐ S1 ☒ GW1
- ☐ RC-S2 ☐ S2 ☐ GW2
- ☐ RC-GW1 ☐ S3 ☐ GW3
- ☐ RC-GW2

7A
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1100274

Instrument ID: Jack.i Calibration Date: 10-JAN-2011 Time: 08:14

Lab File ID: 0110A04 Init. Calib. Date(s): 21-NOV-2 21-NOV-2

Sample No: 8260 CCAL Init. Calib. Times : 07:20 12:43

Compound	RRF	RRF	MIN RRF	%D	MAX %D	
=====	=====	=====	=====	=====	=====	
dichlorodifluoromethane	.62991	.57999	.1	8	20	
chloromethane	.75295	.63984	.1	15	20	
vinyl chloride	.64793	.52058	.1	20	20	
bromomethane	.30313	.27968	.1	8	20	
chloroethane	100	98.453	.1	2	20	
trichlorofluoromethane	.65249	.7397	.1	-13	20	
ethyl ether	.15724	.16566	.05	-5	20	
1,1,-dichloroethene	.38996	.40675	.1	-4	20	
carbon disulfide	1.0398	.95542	.05	8	20	
freon-113	.38864	.51494	.1	-32	20	F
iodomethane	.60797	.50249	.05	17	20	
acrolin	.00623	.01334	.05	-114	20	F
methylene chloride	.64771	.62213	.05	4	20	
acetone	100	82.971	.1	17	20	
trans-1,2-dichloroethene	.66209	.62293	.1	6	20	
methyl acetate	.24309	.23062	.1	5	20	
methyl tert butyl ether	.93223	.8526	.1	9	20	
Diisopropyl Ether	1.4677	1.2906	.05	12	20	
tert butyl alcohol	.03478	.03193	.05	8	20	F
1,1-dichloroethane	1.1648	1.0595	.2	9	20	
halothane	.39599	.31273	.05	21	20	F
acrylonitrile	.13845	.09822	.05	29	20	F
Ethyl-Tert-Butyl-Ether	1.1019	1.0376	.05	6	20	
vinyl acetate	.59474	.55522	.05	7	20	
cis-1,2-dichloroethene	.69628	.66905	.1	4	20	
2,2-dichloropropane	.67519	.77681	.05	-15	20	
cyclohexane	.99294	1.1807	.01	-19	30	
bromochloromethane	.28457	.28112	.05	1	20	
chloroform	1.0901	1.0331	.2	5	20	
carbontetrachloride	.67929	.7874	.1	-16	20	
ethyl acetate	.2684	.23403	.05	13	20	
tetrahydrofuran	.10507	.08278	.05	21	20	F
1,1,1-trichloroethane	.8383	.87545	.1	-4	20	
1,1-dichloropropene	.83584	.79823	.05	4	20	
2-butanone	.1097	.10561	.1	4	20	
benzene	2.4877	2.3723	.5	5	20	
Tertiary-Amyl Methyl Ether	.8416	.82018	.05	3	20	
1,2-dichloroethane	.62372	.56666	.1	9	20	

FORM VII MCP-8260-10

7A
CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1100274

Instrument ID: Jack.i Calibration Date: 10-JAN-2011 Time: 08:14

Lab File ID: 0110A04 Init. Calib. Date(s): 21-NOV-2 21-NOV-2

Sample No: 8260 CCAL Init. Calib. Times : 07:20 12:43

Compound	RRF	RRF	MIN RRF	%D	MAX %D	
=====	=====	=====	=====	=====	=====	
methyl cyclohexane	.94884	1.1907	.01	-25	30	
trichloroethene	.60611	.60277	.2	1	20	
dibromomethane	.28942	.27338	.05	6	20	
1,2-dichloropropane	.61145	.53064	.1	13	20	
bromodichloromethane	.74826	.74984	.2	0	20	
1,4-dioxane	.00185	.00206	.05	-12	20	F
cis-1,3-dichloropropene	.74493	.73405	.2	1	20	
2-chloroethylvinyl ether	.19256	.17794	.05	8	20	
toluene	2.0165	1.8843	.4	7	20	
tetrachloroethene	.85833	.92754	.2	-8	20	
4-methyl-2-pentanone	.09211	.08879	.1	4	20	F
trans-1,3-dichloropropene	.62596	.71944	.1	-15	20	
1,1,2-trichloroethane	.41174	.37292	.1	9	20	
ethyl-methacrylate	.56067	.46215	.01	18	30	
chlorodibromomethane	.5237	.55234	.1	-5	20	
1,3-dichloropropane	.86161	.79354	.05	8	20	
1,2-dibromoethane	.45829	.44039	.1	4	20	
2-hexanone	.19053	.16947	.1	11	20	
chlorobenzene	2.1543	2.0437	.5	5	20	
ethyl benzene	3.7465	3.7057	.1	1	20	
1,1,1,2-tetrachloroethane	.57339	.64842	.05	-13	20	
p/m xylene	1.4383	1.4739	.1	-2	20	
o xylene	1.3632	1.3796	.3	-1	20	
bromoform	.47754	.58366	.1	-22	20	F
styrene	2.2452	2.2275	.3	1	20	
isopropylbenzene	3.5840	3.6351	.1	-1	20	
bromobenzene	1.5869	1.5642	.05	1	20	
n-propylbenzene	7.5117	6.9536	.05	7	20	
1,4-dichloro-2-butane	1.4093	1.1161	.01	21	30	
1,1,2,2,-tetrachloroethane	.98109	.82677	.3	16	20	
1,3,5-trimethylbenzene	5.7825	5.3120	.05	8	20	
4-ethyltoluene	5.7686	5.3429	.01	7	30	
2-chlorotoluene	5.0111	4.5774	.05	9	20	
4-chlorotoluene	4.6273	4.0892	.05	12	20	
1,2,3-trichloropropane	.78023	.6618	.05	15	20	
trans-1,4-dichloro-2-butene	.25315	.20592	.05	19	20	
tert-butylbenzene	4.4081	4.1812	.05	5	20	
1,2,4-trimethylbenzene	5.0985	4.7373	.05	7	20	

FORM VII MCP-8260-10



12/22/10

Technical Report for

Haley & Aldrich

Former Energy International Parcel, MA

06318-502

Accutest Job Number: M96199

Sampling Date: 11/29/10

Report to:

Haley & Aldrich

jkullmann@haleyaldrich.com

ATTN: Jane Kullmann

Total number of pages in report: 161



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Reza Fand
Reza Fand
Lab Director

Client Service contact: Kristen Blanchard 508-481-6200

Certifications: MA (M-MA136,SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) ME (MA00136) FL (E87579) NY (11791) NJ (MA926) PA (6801121) ND (R-188) CO MN (11546AA) NC (653) IL (002337) ISO 17025:2005 (L2235)

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Table of Contents

-1-

Section 1: Sample Summary	4
Section 2: Case Narrative/Conformance Summary	6
Section 3: Sample Results	10
3.1: M96199-1: HA112_0-4'	11
3.2: M96199-1A: HA112_0-4'	21
3.3: M96199-2: HA112_4-8'	22
3.4: M96199-2A: HA112_4-8'	31
3.5: M96199-3: HA113_0-4'	32
3.6: M96199-3A: HA113_0-4'	41
3.7: M96199-4: HA113_12-15.5'	42
3.8: M96199-5: HA111_0-4'	51
3.9: M96199-5A: HA111_0-4'	60
3.10: M96199-6: HA111_8-12'	61
Section 4: Misc. Forms	70
4.1: Certification Exceptions	71
4.2: Chain of Custody	72
4.3: MCP Form	73
4.4: EPH Form	74
4.5: VPH Form	80
4.6: Sample Tracking Chronicle	86
Section 5: GC/MS Volatiles - QC Data Summaries	90
5.1: Method Blank Summary	91
5.2: Blank Spike/Blank Spike Duplicate Summary	97
5.3: Matrix Spike/Matrix Spike Duplicate Summary	103
5.4: Internal Standard Area Summaries	106
5.5: Surrogate Recovery Summaries	109
Section 6: GC/MS Semi-volatiles - QC Data Summaries	110
6.1: Method Blank Summary	111
6.2: Blank Spike/Blank Spike Duplicate Summary	113
6.3: Matrix Spike/Matrix Spike Duplicate Summary	116
6.4: Internal Standard Area Summaries	119
6.5: Surrogate Recovery Summaries	121
Section 7: GC Volatiles - QC Data Summaries	122
7.1: Method Blank Summary	123
7.2: Blank Spike/Blank Spike Duplicate Summary	124
7.3: Surrogate Recovery Summaries	125
Section 8: GC Semi-volatiles - QC Data Summaries	126
8.1: Method Blank Summary	127
8.2: Blank Spike/Blank Spike Duplicate Summary	128
8.3: Matrix Spike/Matrix Spike Duplicate Summary	129
8.4: Surrogate Recovery Summaries	130
Section 9: Metals Analysis - QC Data Summaries	131

Table of Contents

-2-

9.1: Prep QC MP16325: Sb,As,Ba,Be,Cd,Cr,Pb,Ni,Se,Ag,Tl,V,Zn	132
9.2: Prep QC MP16331: Hg	144
9.3: Prep QC MP16354: Pb	148
Section 10: General Chemistry - QC Data Summaries	158
10.1: Method Blank and Spike Results Summary	159
10.2: Duplicate Results Summary	160
10.3: Matrix Spike Results Summary	161

1

2

3

4

5

6

7

8

9

10

Sample Summary

Haley & Aldrich

Job No: M96199

Former Energy International Parcel, MA
Project No: 06318-502

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
M96199-1	11/29/10	08:25 MG	11/29/10	SO	Soil	HA112_0-4'
M96199-1A	11/29/10	08:25 MG	11/29/10	SO	Soil	HA112_0-4'
M96199-2	11/29/10	09:00 MG	11/29/10	SO	Soil	HA112_4-8'
M96199-2A	11/29/10	09:00 MG	11/29/10	SO	Soil	HA112_4-8'
M96199-3	11/29/10	11:25 MG	11/29/10	SO	Soil	HA113_0-4'
M96199-3A	11/29/10	11:25 MG	11/29/10	SO	Soil	HA113_0-4'
M96199-4	11/29/10	12:50 MG	11/29/10	SO	Soil	HA113_12-15.5'
M96199-5	11/29/10	14:00 MG	11/29/10	SO	Soil	HA111_0-4'
M96199-5A	11/29/10	14:00 MG	11/29/10	SO	Soil	HA111_0-4'
M96199-5AD	11/29/10	14:00 MG	11/29/10	SO	Soil Dup/MSD	HA111_0-4'
M96199-5AS	11/29/10	14:00 MG	11/29/10	SO	Soil Matrix Spike	HA111_0-4'
M96199-5D	11/29/10	14:00 MG	11/29/10	SO	Soil Dup/MSD	HA111_0-4'
M96199-5S	11/29/10	14:00 MG	11/29/10	SO	Soil Matrix Spike	HA111_0-4'

Soil samples reported on a dry weight basis unless otherwise indicated on result page.



Sample Summary
(continued)

Haley & Aldrich

Job No: M96199

Former Energy International Parcel, MA
Project No: 06318-502

Sample Number	Collected		Matrix			Client Sample ID
	Date	Time By	Received	Code	Type	
M96199-6	11/29/10	15:05 MG	11/29/10	SO	Soil	HA111_8-12'

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Haley & Aldrich

Job No M96199

Site: Former Energy International Parcel, MA

Report Date 12/22/2010 6:13:08 PM

6 Sample(s) were collected on 11/29/2010 and were received at Accutest on 11/29/2010 properly preserved, at 1.3 Deg. C and intact. These Samples received an Accutest job number of M96199. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix SO

Batch ID: MSR660

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Continuing calibration check standard MSR660-CC638 for Tetrahydrofuran, 4-methyl-2-pentanone, 2-hexanone exceed 20% Difference. This check standard met MCP criteria.
- Initial calibration verification MSR638-ICV638 for acetone, isopropylbenzene exceed 30% Difference.
- The response factor (RF) for the 2-Butanone low point in the initial calibration MSR638-ICC638 is 0.028, less than the required RF of 0.1 as noted in Table 4 of SW846 8260C. 2-Butanone is a potential difficult compound.

Matrix SO

Batch ID: MSR663

- All samples were analyzed within the recommended method holding time.
- Sample(s) M96199-5MS, M96199-5MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Blank Spike Recovery(s) for Hexachlorobutadiene, Isopropylbenzene are outside control limits. Blank Spike meets program technical requirements.
- Matrix Spike Recovery(s) for Vinyl chloride are outside control limits. Outside control limits due to possible matrix interference. Refer to Blank Spike.
- Matrix Spike Duplicate Recovery(s) for 2-Hexanone, Acetone, Carbon tetrachloride, Hexachlorobutadiene, Isopropylbenzene are outside control limits. Outside control limits due to possible matrix interference. Refer to Blank Spike.
- BSD Recovery(s) for Carbon tetrachloride, Dibromochloromethane, Tetrachloroethene, Hexachlorobutadiene, Isopropylbenzene are outside control limits. Blank Spike meets program technical requirements.
- Continuing calibration check standard MSR663-CC638 for chloromethane, trichlorofluoromethane, Tetrahydrofuran, carbon tetrachloride, dibromochloromethane, 1,1,1,2-tetrachloroethane, hexachlorobutadiene exceed 20% Difference. This check standard met MCP criteria.

Extractables by GCMS By Method SW846 8270C

Matrix SO

Batch ID: OP23515

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) M96225-8MS, M96225-8MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- BS, MS Recovery(s) for Benzoic acid, Hexachlorocyclopentadiene are outside control limits. Blank Spike meets program technical requirements.
- Matrix Spike Recovery(s) for Fluoranthene is outside control limits. Outside control limits due to high level in sample relative to spike amount.
- Matrix Spike Duplicate Recovery(s) for Hexachloroethane, 2-Methylnaphthalene, 3,3'-Dichlorobenzidine, Acenaphthene, Acenaphthylene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Chrysene, Dibenzo(a,h)anthracene, Dibenzofuran, Fluorene, Indeno(1,2,3-cd)pyrene are outside control limits. Outside control limits due to possible matrix interference. Refer to Blank Spike.
- RPD(s) for MSD for 2-Methylnaphthalene, 3,3'-Dichlorobenzidine, Acenaphthene, Acenaphthylene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, bis(2-Ethylhexyl)phthalate, Chrysene, Dibenzo(a,h)anthracene, Dibenzofuran, Fluorene, Indeno(1,2,3-cd)pyrene, N-Nitrosodiphenylamine, Phenanthrene, Pyrene are outside control limits for sample OP23515-MSD. High RPD due to possible matrix interference and/or sample non-homogeneity.
- BSD, MSD Recovery(s) for Benzoic acid, 2,4-Dinitrophenol, Hexachlorocyclopentadiene are outside control limits. Blank Spike meets program technical requirements.
- OP23515-MSD for 2,4-Dinitrophenol: Outside control limits. Blank Spike meets program technical requirements.
- Initial calibration verification standard MSS806-ICV805 file S19551 for Aniline, 4-Chloroaniline, 3,3'-Dichlorobenzidine, Hexachlorocyclopentadiene exceeds 30% Difference
- Matrix Spike Recovery(s) for 3,3'-Dichlorobenzidine, Hexachloroethane, Naphthalene are outside control limits. Outside control limits due to possible matrix interference. Refer to Blank Spike.
- RPD of OP23515-MSD for 2,4-Dinitrophenol: Outside control limits. Blank Spike meets program technical requirements.
- RPD of OP23515-MSD for Fluoranthene: Outside control limits due to high level in sample relative to spike amount.
- OContinuing calibration check standard MSS816-CC805 for bis(2-Ethylhexyl)phthalate, Di-n-octylphthalate exceed 20% Difference. This check standard met MCP criteria.
- MSD Recovery(s) for Fluoranthene, Phenanthrene, Pyrene is outside control limits. Outside control limits due to high level in sample relative to spike amount.

Volatiles by GC By Method MADEP VPH REV 1.1

Matrix SO

Batch ID: GBH926

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Only Range requested.

Extractables by GC By Method MADEP EPH REV 1.1

Matrix SO

Batch ID: OP23505

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) M96199-5MS, M96199-5MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Only range requested.
- M96199-1 for o-Terphenyl: Outside control limits due to possible matrix interference.
- OP23505-BS/BSO for C11-C22 Aromatics (Unadj.): Aromatic breakthrough (naphthalene and/or 2-methylnaphthalene) exceeded 5% method limit. Results confirmed by refractionation.
- M96199-2, M96199-3 for 1-Chlorooctadecane: Outside control limits due to possible matrix interference. Confirmed by refractionation.

Metals By Method SW846 6010C

Matrix LEACHATE

Batch ID: MP16354

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M96199-5ADUP, M96199-5AMS, M96199-5ASDL, M96289-4ALS were used as the QC samples for metals.

Matrix SO

Batch ID: MP16325

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M96199-5DUP, M96199-5MS, M96199-5PS, M96199-5SDL, M96199-5DUP were used as the QC samples for metals.
- Matrix Spike Recovery(s) for Antimony, Barium are outside control limits. Spike recovery indicates possible matrix interference and/or sample nonhomogeneity. Post spike is not within acceptable range.
- Matrix Spike Recovery(s) for Lead are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
- RPD(s) for Duplicate for Antimony, Barium are outside control limits for sample MP16325-D1. High RPD due to possible matrix interference and/or sample non-homogeneity.
- RPD(s) for Serial Dilution for Antimony, Selenium, Silver are outside control limits for sample MP16325-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- MP16325-SD1 for Chromium, Nickel, Zinc: Serial dilution indicates possible matrix interference.
- MP16325-D1 for Thallium: RPD acceptable due to low duplicate and sample concentrations.

Metals By Method SW846 7471A

Matrix SO

Batch ID: MP16331

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M96199-5DUP, M96199-5MS were used as the QC samples for metals.
- Matrix Spike Recovery(s) for Mercury are outside control limits. Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.
- RPD(s) for Duplicate for Mercury are outside control limits for sample MP16331-D1. High RPD due to possible matrix interference and/or sample non-homogeneity.

Wet Chemistry By Method ASTM D1498-76M

Matrix SO

Batch ID: GN33623

- Sample(s) M96199-6DUP were used as the QC samples for Redox Potential Vs H2.
- GN33623-D1 for Redox Potential Vs H2: Analysis requested after recommended holding time.
- M96199-1 through M96199-6 for Redox Potential Vs H2: Analysis requested after recommended holding time.

Wet Chemistry By Method SM21 2540 B MOD.

Matrix SO

Batch ID: GN33576

- Sample(s) M96199-5DUP were used as the QC samples for Solids, Percent.

Wet Chemistry By Method SW846 1020

Matrix SO

Batch ID: GN33600

- Sample(s) M96199-5DUP were used as the QC samples for Ignitability (Flashpoint).

Wet Chemistry By Method SW846 9045

Matrix SO	Batch ID: GN33588
------------------	--------------------------

- Sample(s) M96199-5DUP were used as the QC samples for pH.

Wet Chemistry By Method SW846 CHAP7

Matrix SO	Batch ID: GN33584
------------------	--------------------------

- Sample(s) M96199-5DUP were used as the QC samples for Corrosivity as pH.

Matrix SO	Batch ID: GP12374
------------------	--------------------------

- All samples were distilled within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M96225-8DUP, M96225-8MS were used as the QC samples for Cyanide Reactivity.

Matrix SO	Batch ID: GP12375
------------------	--------------------------

- All samples were distilled within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M96225-8DUP, M96225-8MS were used as the QC samples for Sulfide Reactivity.

Accutest may not have met all requested limits due to methodology limitations, sample matrix, dilutions, or percents solids.

The Accutest Laboratories of New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety. The Accutest Laboratories of NE, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report(M96199).

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	HA112_0-4'	Date Sampled:	11/29/10
Lab Sample ID:	M96199-1	Date Received:	11/29/10
Matrix:	SO - Soil	Percent Solids:	91.9
Method:	SW846 8260B		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R18541.D	1	12/02/10	GK	n/a	n/a	MSR660
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	11.3 g	10.0 ml	100 ul
Run #2			

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	260	ug/kg	
71-43-2	Benzene	ND	26	ug/kg	
108-86-1	Bromobenzene	ND	260	ug/kg	
74-97-5	Bromochloromethane	ND	260	ug/kg	
75-27-4	Bromodichloromethane	ND	110	ug/kg	
75-25-2	Bromoform	ND	110	ug/kg	
74-83-9	Bromomethane	ND	110	ug/kg	
78-93-3	2-Butanone (MEK)	ND	260	ug/kg	
104-51-8	n-Butylbenzene	ND	260	ug/kg	
135-98-8	sec-Butylbenzene	ND	260	ug/kg	
98-06-6	tert-Butylbenzene	ND	260	ug/kg	
75-15-0	Carbon disulfide	ND	260	ug/kg	
56-23-5	Carbon tetrachloride	ND	110	ug/kg	
108-90-7	Chlorobenzene	ND	110	ug/kg	
75-00-3	Chloroethane	ND	260	ug/kg	
67-66-3	Chloroform	ND	110	ug/kg	
74-87-3	Chloromethane	ND	260	ug/kg	
95-49-8	o-Chlorotoluene	ND	260	ug/kg	
106-43-4	p-Chlorotoluene	ND	260	ug/kg	
108-20-3	Di-Isopropyl ether	ND	110	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	260	ug/kg	
124-48-1	Dibromochloromethane	ND	110	ug/kg	
106-93-4	1,2-Dibromoethane	ND	110	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	110	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	110	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	110	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	110	ug/kg	
75-34-3	1,1-Dichloroethane	ND	110	ug/kg	
107-06-2	1,2-Dichloroethane	ND	110	ug/kg	
75-35-4	1,1-Dichloroethene	ND	110	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	110	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	110	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA112_0-4'

Lab Sample ID: M96199-1

Date Sampled: 11/29/10

Matrix: SO - Soil

Date Received: 11/29/10

Method: SW846 8260B

Percent Solids: 91.9

Project: Former Energy International Parcel, MA

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
78-87-5	1,2-Dichloropropane	ND	110	ug/kg	
142-28-9	1,3-Dichloropropane	ND	260	ug/kg	
594-20-7	2,2-Dichloropropane	ND	260	ug/kg	
563-58-6	1,1-Dichloropropene	ND	260	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	110	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	110	ug/kg	
123-91-1	1,4-Dioxane	ND	1300	ug/kg	
60-29-7	Ethyl Ether	ND	260	ug/kg	
100-41-4	Ethylbenzene	ND	110	ug/kg	
87-68-3	Hexachlorobutadiene	ND	260	ug/kg	
591-78-6	2-Hexanone	ND	260	ug/kg	
98-82-8	Isopropylbenzene	ND	260	ug/kg	
99-87-6	p-Isopropyltoluene	ND	260	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	110	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	260	ug/kg	
74-95-3	Methylene bromide	ND	260	ug/kg	
75-09-2	Methylene chloride	ND	110	ug/kg	
91-20-3	Naphthalene	385	260	ug/kg	
103-65-1	n-Propylbenzene	ND	260	ug/kg	
100-42-5	Styrene	ND	260	ug/kg	
994-05-8	tert-Amyl Methyl Ether	ND	260	ug/kg	
637-92-3	tert-Butyl Ethyl Ether	ND	110	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	260	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	110	ug/kg	
127-18-4	Tetrachloroethene	ND	110	ug/kg	
109-99-9	Tetrahydrofuran	ND	530	ug/kg	
108-88-3	Toluene	ND	260	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	260	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	260	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	110	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	110	ug/kg	
79-01-6	Trichloroethene	ND	110	ug/kg	
75-69-4	Trichlorofluoromethane	ND	110	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	260	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	260	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	260	ug/kg	
75-01-4	Vinyl chloride	ND	110	ug/kg	
	m,p-Xylene	ND	110	ug/kg	
95-47-6	o-Xylene	ND	110	ug/kg	
1330-20-7	Xylene (total)	ND	110	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA112_0-4'	Date Sampled:	11/29/10
Lab Sample ID:	M96199-1	Date Received:	11/29/10
Matrix:	SO - Soil	Percent Solids:	91.9
Method:	SW846 8260B		
Project:	Former Energy International Parcel, MA		

VOA MCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		70-130%
2037-26-5	Toluene-D8	104%		70-130%
460-00-4	4-Bromofluorobenzene	101%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA112_0-4'	Date Sampled:	11/29/10
Lab Sample ID:	M96199-1	Date Received:	11/29/10
Matrix:	SO - Soil	Percent Solids:	91.9
Method:	SW846 8270C SW846 3545		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	S19768.D	1	12/06/10	PR	12/03/10	OP23515	MSS816
Run #2	S19787.D	10	12/07/10	PR	12/03/10	OP23515	MSS818

	Initial Weight	Final Volume
Run #1	20.9 g	1.0 ml
Run #2	20.9 g	1.0 ml

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
65-85-0	Benzoic acid	634	520	ug/kg	
95-57-8	2-Chlorophenol	ND	260	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	520	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	520	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	520	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1000	ug/kg	
95-48-7	2-Methylphenol	ND	520	ug/kg	
	3&4-Methylphenol	ND	520	ug/kg	
88-75-5	2-Nitrophenol	ND	520	ug/kg	
100-02-7	4-Nitrophenol	ND	1000	ug/kg	
87-86-5	Pentachlorophenol	ND	520	ug/kg	
108-95-2	Phenol	ND	260	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	520	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	520	ug/kg	
83-32-9	Acenaphthene	705	260	ug/kg	
208-96-8	Acenaphthylene	1580	260	ug/kg	
98-86-2	Acetophenone	ND	520	ug/kg	
62-53-3	Aniline	ND	520	ug/kg	
120-12-7	Anthracene	3700	260	ug/kg	
56-55-3	Benzo(a)anthracene	9030	260	ug/kg	
50-32-8	Benzo(a)pyrene	6950	260	ug/kg	
205-99-2	Benzo(b)fluoranthene	7450	260	ug/kg	
191-24-2	Benzo(g,h,i)perylene	3870	260	ug/kg	
207-08-9	Benzo(k)fluoranthene	4280	260	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	260	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	260	ug/kg	
91-58-7	2-Chloronaphthalene	ND	260	ug/kg	
106-47-8	4-Chloroaniline	ND	520	ug/kg	
218-01-9	Chrysene	9170	260	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	260	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	260	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	260	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA112_0-4'	Date Sampled:	11/29/10
Lab Sample ID:	M96199-1	Date Received:	11/29/10
Matrix:	SO - Soil	Percent Solids:	91.9
Method:	SW846 8270C SW846 3545		
Project:	Former Energy International Parcel, MA		

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	260	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	260	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	260	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	260	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	520	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	520	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	260	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	2260	260	ug/kg	
132-64-9	Dibenzofuran	1150	260	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	260	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	260	ug/kg	
84-66-2	Diethyl phthalate	ND	260	ug/kg	
131-11-3	Dimethyl phthalate	ND	260	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	260	ug/kg	
206-44-0	Fluoranthene	22000 ^a	2600	ug/kg	
86-73-7	Fluorene	1190	260	ug/kg	
118-74-1	Hexachlorobenzene	ND	260	ug/kg	
87-68-3	Hexachlorobutadiene	ND	260	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	520	ug/kg	
67-72-1	Hexachloroethane	ND	260	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	4260	260	ug/kg	
78-59-1	Isophorone	ND	260	ug/kg	
91-57-6	2-Methylnaphthalene	318	260	ug/kg	
91-20-3	Naphthalene	628	260	ug/kg	
98-95-3	Nitrobenzene	ND	260	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	260	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	260	ug/kg	
85-01-8	Phenanthrene	18400 ^a	2600	ug/kg	
129-00-0	Pyrene	19500 ^a	2600	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	260	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	66%	74%	30-130%
4165-62-2	Phenol-d5	67%	77%	30-130%
118-79-6	2,4,6-Tribromophenol	90%	82%	30-130%
4165-60-0	Nitrobenzene-d5	65%	72%	30-130%
321-60-8	2-Fluorobiphenyl	74%	88%	30-130%
1718-51-0	Terphenyl-d14	83%	110%	30-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA112_0-4'**Lab Sample ID:** M96199-1**Date Sampled:** 11/29/10**Matrix:** SO - Soil**Date Received:** 11/29/10**Method:** SW846 8270C SW846 3545**Percent Solids:** 91.9**Project:** Former Energy International Parcel, MA

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
---------	----------	--------	----	-------	---

(a) Result is from Run# 2

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA112_0-4'	Date Sampled:	11/29/10
Lab Sample ID:	M96199-1	Date Received:	11/29/10
Matrix:	SO - Soil	Percent Solids:	91.9
Method:	MADEP VPH REV 1.1		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BH17786.D	1	12/06/10	AP	n/a	n/a	GBH926
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	11.3 g	11.0 ml	100 ul
Run #2			

Volatile TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C5- C8 Aliphatics (Unadj.)	ND	5800	ug/kg	
	C9- C12 Aliphatics (Unadj.)	ND	5800	ug/kg	
	C9- C10 Aromatics (Unadj.)	ND	5800	ug/kg	
	C5- C8 Aliphatics	ND	5800	ug/kg	
	C9- C12 Aliphatics	ND	5800	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	108%		70-130%
615-59-8	2,5-Dibromotoluene	101%		70-130%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA112_0-4'	Date Sampled:	11/29/10
Lab Sample ID:	M96199-1	Date Received:	11/29/10
Matrix:	SO - Soil	Percent Solids:	91.9
Method:	MADEP EPH REV 1.1 SW846 3550B		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BJ71.D	1	12/04/10	KD	12/02/10	OP23505	GBJ2
Run #2							

	Initial Weight	Final Volume
Run #1	11.2 g	2.0 ml
Run #2		

Extractable TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C11-C22 Aromatics (Unadj.)	495000	19000	ug/kg	
	C9-C18 Aliphatics	12100	9700	ug/kg	
	C19-C36 Aliphatics	58200	9700	ug/kg	
	C11-C22 Aromatics	325000	19000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	181% ^a		40-140%
321-60-8	2-Fluorobiphenyl	89%		40-140%
580-13-2	2-Bromonaphthalene	87%		40-140%
3386-33-2	1-Chlorooctadecane	61%		40-140%

(a) Outside control limits due to possible matrix interference.

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA112_0-4'

Lab Sample ID: M96199-1

Matrix: SO - Soil

Date Sampled: 11/29/10

Date Received: 11/29/10

Percent Solids: 91.9

Project: Former Energy International Parcel, MA

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analized By	Method	Prep Method
Antimony	< 0.81	0.81	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Arsenic	6.9	0.81	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Barium	71.4	4.1	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Beryllium	0.45	0.32	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Cadmium	0.66	0.32	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Chromium	8.9	0.81	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Lead	722	0.81	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Mercury	0.69	0.032	mg/kg	1	12/03/10	12/03/10 PY	SW846 7471A ¹	SW846 7471A ⁴
Nickel	9.7	3.2	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Selenium	< 0.81	0.81	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Silver	< 0.41	0.41	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Thallium	< 0.81	0.81	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Vanadium	17.0	0.81	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Zinc	172	1.6	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³

(1) Instrument QC Batch: MA12492

(2) Instrument QC Batch: MA12497

(3) Prep QC Batch: MP16325

(4) Prep QC Batch: MP16331

RL = Reporting Limit

Report of Analysis

Client Sample ID: HA112_0-4'**Lab Sample ID:** M96199-1**Matrix:** SO - Soil**Date Sampled:** 11/29/10**Date Received:** 11/29/10**Percent Solids:** 91.9**Project:** Former Energy International Parcel, MA

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Corrosivity as pH	6.9			1	11/30/10	MA	SW846 CHAP7
Cyanide Reactivity	< 1.6	1.6	mg/kg	1	12/06/10	BF	SW846 CHAP7
Ignitability (Flashpoint)	> 230		Deg. F	1	12/02/10	BF	SW846 1020
Redox Potential Vs H2 ^a	380		mv	1	12/03/10	MC	ASTM D1498-76M
Solids, Percent	91.9		%	1	12/01/10	HS	SM21 2540 B MOD.
Sulfide Reactivity	< 54	54	mg/kg	1	12/06/10	BF	SW846 CHAP7
pH	6.9		su	1	11/30/10	MA	SW846 9045

(a) Analysis requested after recommended holding time.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HA112_0-4'	Date Sampled:	11/29/10
Lab Sample ID:	M96199-1A	Date Received:	11/29/10
Matrix:	SO - Soil	Percent Solids:	91.9
Project:	Former Energy International Parcel, MA		

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	1.8	D008	5.0	0.010	mg/l	1	12/09/10	12/09/10 DA	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA12508
(2) Prep QC Batch: MP16354

RL = Reporting Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)

Report of Analysis

Client Sample ID:	HA112_4-8'	Date Sampled:	11/29/10
Lab Sample ID:	M96199-2	Date Received:	11/29/10
Matrix:	SO - Soil	Percent Solids:	82.7
Method:	SW846 8260B		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R18542.D	1	12/02/10	GK	n/a	n/a	MSR660
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	9.55 g	10.0 ml	100 ul
Run #2			

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	370	ug/kg	
71-43-2	Benzene	ND	37	ug/kg	
108-86-1	Bromobenzene	ND	370	ug/kg	
74-97-5	Bromochloromethane	ND	370	ug/kg	
75-27-4	Bromodichloromethane	ND	150	ug/kg	
75-25-2	Bromoform	ND	150	ug/kg	
74-83-9	Bromomethane	ND	150	ug/kg	
78-93-3	2-Butanone (MEK)	ND	370	ug/kg	
104-51-8	n-Butylbenzene	ND	370	ug/kg	
135-98-8	sec-Butylbenzene	ND	370	ug/kg	
98-06-6	tert-Butylbenzene	ND	370	ug/kg	
75-15-0	Carbon disulfide	ND	370	ug/kg	
56-23-5	Carbon tetrachloride	ND	150	ug/kg	
108-90-7	Chlorobenzene	ND	150	ug/kg	
75-00-3	Chloroethane	ND	370	ug/kg	
67-66-3	Chloroform	ND	150	ug/kg	
74-87-3	Chloromethane	ND	370	ug/kg	
95-49-8	o-Chlorotoluene	ND	370	ug/kg	
106-43-4	p-Chlorotoluene	ND	370	ug/kg	
108-20-3	Di-Isopropyl ether	ND	150	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	370	ug/kg	
124-48-1	Dibromochloromethane	ND	150	ug/kg	
106-93-4	1,2-Dibromoethane	ND	150	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	150	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	150	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	150	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	150	ug/kg	
75-34-3	1,1-Dichloroethane	ND	150	ug/kg	
107-06-2	1,2-Dichloroethane	ND	150	ug/kg	
75-35-4	1,1-Dichloroethene	ND	150	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	150	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	150	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA112_4-8'	Date Sampled:	11/29/10
Lab Sample ID:	M96199-2	Date Received:	11/29/10
Matrix:	SO - Soil	Percent Solids:	82.7
Method:	SW846 8260B		
Project:	Former Energy International Parcel, MA		

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
78-87-5	1,2-Dichloropropane	ND	150	ug/kg	
142-28-9	1,3-Dichloropropane	ND	370	ug/kg	
594-20-7	2,2-Dichloropropane	ND	370	ug/kg	
563-58-6	1,1-Dichloropropene	ND	370	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	150	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	150	ug/kg	
123-91-1	1,4-Dioxane	ND	1800	ug/kg	
60-29-7	Ethyl Ether	ND	370	ug/kg	
100-41-4	Ethylbenzene	ND	150	ug/kg	
87-68-3	Hexachlorobutadiene	ND	370	ug/kg	
591-78-6	2-Hexanone	ND	370	ug/kg	
98-82-8	Isopropylbenzene	ND	370	ug/kg	
99-87-6	p-Isopropyltoluene	ND	370	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	150	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	370	ug/kg	
74-95-3	Methylene bromide	ND	370	ug/kg	
75-09-2	Methylene chloride	ND	150	ug/kg	
91-20-3	Naphthalene	ND	370	ug/kg	
103-65-1	n-Propylbenzene	ND	370	ug/kg	
100-42-5	Styrene	ND	370	ug/kg	
994-05-8	tert-Amyl Methyl Ether	ND	370	ug/kg	
637-92-3	tert-Butyl Ethyl Ether	ND	150	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	370	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	150	ug/kg	
127-18-4	Tetrachloroethene	ND	150	ug/kg	
109-99-9	Tetrahydrofuran	ND	740	ug/kg	
108-88-3	Toluene	ND	370	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	370	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	370	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	150	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	150	ug/kg	
79-01-6	Trichloroethene	ND	150	ug/kg	
75-69-4	Trichlorofluoromethane	ND	150	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	370	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	370	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	370	ug/kg	
75-01-4	Vinyl chloride	ND	150	ug/kg	
	m,p-Xylene	ND	150	ug/kg	
95-47-6	o-Xylene	ND	150	ug/kg	
1330-20-7	Xylene (total)	ND	150	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA112_4-8'	Date Sampled:	11/29/10
Lab Sample ID:	M96199-2	Date Received:	11/29/10
Matrix:	SO - Soil	Percent Solids:	82.7
Method:	SW846 8260B		
Project:	Former Energy International Parcel, MA		

VOA MCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	110%		70-130%
2037-26-5	Toluene-D8	113%		70-130%
460-00-4	4-Bromofluorobenzene	111%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA112_4-8'	Date Sampled:	11/29/10
Lab Sample ID:	M96199-2	Date Received:	11/29/10
Matrix:	SO - Soil	Percent Solids:	82.7
Method:	SW846 8270C SW846 3545		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	S19769.D	1	12/06/10	PR	12/03/10	OP23515	MSS816
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.5 g	1.0 ml
Run #2		

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
65-85-0	Benzoic acid	771	590	ug/kg	
95-57-8	2-Chlorophenol	ND	290	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	590	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	590	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	590	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1200	ug/kg	
95-48-7	2-Methylphenol	ND	590	ug/kg	
	3&4-Methylphenol	ND	590	ug/kg	
88-75-5	2-Nitrophenol	ND	590	ug/kg	
100-02-7	4-Nitrophenol	ND	1200	ug/kg	
87-86-5	Pentachlorophenol	ND	590	ug/kg	
108-95-2	Phenol	ND	290	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	590	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	590	ug/kg	
83-32-9	Acenaphthene	829	290	ug/kg	
208-96-8	Acenaphthylene	724	290	ug/kg	
98-86-2	Acetophenone	ND	590	ug/kg	
62-53-3	Aniline	ND	590	ug/kg	
120-12-7	Anthracene	2610	290	ug/kg	
56-55-3	Benzo(a)anthracene	4970	290	ug/kg	
50-32-8	Benzo(a)pyrene	3930	290	ug/kg	
205-99-2	Benzo(b)fluoranthene	3690	290	ug/kg	
191-24-2	Benzo(g,h,i)perylene	2000	290	ug/kg	
207-08-9	Benzo(k)fluoranthene	3210	290	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	290	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	290	ug/kg	
91-58-7	2-Chloronaphthalene	ND	290	ug/kg	
106-47-8	4-Chloroaniline	ND	590	ug/kg	
218-01-9	Chrysene	5140	290	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	290	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	290	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	290	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA112_4-8'	Date Sampled:	11/29/10
Lab Sample ID:	M96199-2	Date Received:	11/29/10
Matrix:	SO - Soil	Percent Solids:	82.7
Method:	SW846 8270C SW846 3545		
Project:	Former Energy International Parcel, MA		

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	290	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	290	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	290	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	290	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	590	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	590	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	290	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	1120	290	ug/kg	
132-64-9	Dibenzofuran	986	290	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	290	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	290	ug/kg	
84-66-2	Diethyl phthalate	ND	290	ug/kg	
131-11-3	Dimethyl phthalate	ND	290	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	290	ug/kg	
206-44-0	Fluoranthene	8940	290	ug/kg	
86-73-7	Fluorene	1240	290	ug/kg	
118-74-1	Hexachlorobenzene	ND	290	ug/kg	
87-68-3	Hexachlorobutadiene	ND	290	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	590	ug/kg	
67-72-1	Hexachloroethane	ND	290	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	2140	290	ug/kg	
78-59-1	Isophorone	ND	290	ug/kg	
91-57-6	2-Methylnaphthalene	501	290	ug/kg	
91-20-3	Naphthalene	954	290	ug/kg	
98-95-3	Nitrobenzene	ND	290	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	290	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	290	ug/kg	
85-01-8	Phenanthrene	7940	290	ug/kg	
129-00-0	Pyrene	7230	290	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	290	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	62%		30-130%
4165-62-2	Phenol-d5	63%		30-130%
118-79-6	2,4,6-Tribromophenol	82%		30-130%
4165-60-0	Nitrobenzene-d5	56%		30-130%
321-60-8	2-Fluorobiphenyl	68%		30-130%
1718-51-0	Terphenyl-d14	69%		30-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA112_4-8'	Date Sampled:	11/29/10
Lab Sample ID:	M96199-2	Date Received:	11/29/10
Matrix:	SO - Soil	Percent Solids:	82.7
Method:	MADEP VPH REV 1.1		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BH17787.D	1	12/06/10	AP	n/a	n/a	GBH926
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	9.55 g	11.0 ml	100 ul
Run #2			

Volatile TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C5- C8 Aliphatics (Unadj.)	10300	8000	ug/kg	
	C9- C12 Aliphatics (Unadj.)	ND	8000	ug/kg	
	C9- C10 Aromatics (Unadj.)	ND	8000	ug/kg	
	C5- C8 Aliphatics	10300	8000	ug/kg	
	C9- C12 Aliphatics	ND	8000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	100%		70-130%
615-59-8	2,5-Dibromotoluene	93%		70-130%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA112_4-8'	Date Sampled:	11/29/10
Lab Sample ID:	M96199-2	Date Received:	11/29/10
Matrix:	SO - Soil	Percent Solids:	82.7
Method:	MADEP EPH REV 1.1 SW846 3550B		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BG23601.D	1	12/08/10	AL	12/02/10	OP23505	GBG777
Run #2							

	Initial Weight	Final Volume
Run #1	11.8 g	2.0 ml
Run #2		

Extractable TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C11-C22 Aromatics (Unadj.)	94700	21000	ug/kg	
	C9-C18 Aliphatics	31100	10000	ug/kg	
	C19-C36 Aliphatics	77700	10000	ug/kg	
	C11-C22 Aromatics	74100	21000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	78%		40-140%
321-60-8	2-Fluorobiphenyl	91%		40-140%
580-13-2	2-Bromonaphthalene	92%		40-140%
3386-33-2	1-Chlorooctadecane	17% ^a		40-140%

(a) Outside control limits due to possible matrix interference. Confirmed by refractionation.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA112_4-8'

Lab Sample ID: M96199-2

Matrix: SO - Soil

Date Sampled: 11/29/10

Date Received: 11/29/10

Percent Solids: 82.7

Project: Former Energy International Parcel, MA

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analized By	Method	Prep Method
Antimony	< 0.87	0.87	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Arsenic	12.4	0.87	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Barium	109	4.3	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Beryllium	0.50	0.35	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Cadmium	0.78	0.35	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Chromium	17.3	0.87	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Lead	335	0.87	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Mercury	0.98	0.037	mg/kg	1	12/03/10	12/03/10 PY	SW846 7471A ¹	SW846 7471A ⁴
Nickel	17.1	3.5	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Selenium	2.0	0.87	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Silver	< 0.43	0.43	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Thallium	< 0.87	0.87	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Vanadium	26.9	0.87	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Zinc	682	1.7	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³

(1) Instrument QC Batch: MA12492

(2) Instrument QC Batch: MA12497

(3) Prep QC Batch: MP16325

(4) Prep QC Batch: MP16331

RL = Reporting Limit

Report of Analysis

Client Sample ID: HA112_4-8'**Lab Sample ID:** M96199-2**Matrix:** SO - Soil**Project:** Former Energy International Parcel, MA**Date Sampled:** 11/29/10**Date Received:** 11/29/10**Percent Solids:** 82.7

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Corrosivity as pH	7.4			1	11/30/10	MA	SW846 CHAP7
Cyanide Reactivity	< 1.8	1.8	mg/kg	1	12/06/10	BF	SW846 CHAP7
Ignitability (Flashpoint)	> 230		Deg. F	1	12/02/10	BF	SW846 1020
Redox Potential Vs H2 ^a	384		mv	1	12/03/10	MC	ASTM D1498-76M
Solids, Percent	82.7		%	1	12/01/10	HS	SM21 2540 B MOD.
Sulfide Reactivity	< 60	60	mg/kg	1	12/06/10	BF	SW846 CHAP7
pH	7.4		su	1	11/30/10	MA	SW846 9045

(a) Analysis requested after recommended holding time.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HA112_4-8'	Date Sampled:	11/29/10
Lab Sample ID:	M96199-2A	Date Received:	11/29/10
Matrix:	SO - Soil	Percent Solids:	82.7
Project:	Former Energy International Parcel, MA		

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	0.56	D008	5.0	0.010	mg/l	1	12/09/10	12/09/10 DA	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA12508
(2) Prep QC Batch: MP16354

RL = Reporting Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)

Report of Analysis

Client Sample ID:	HA113_0-4'	Date Sampled:	11/29/10
Lab Sample ID:	M96199-3	Date Received:	11/29/10
Matrix:	SO - Soil	Percent Solids:	83.5
Method:	SW846 8260B		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R18543.D	1	12/02/10	GK	n/a	n/a	MSR660
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	10.0 g	10.0 ml	100 ul
Run #2			

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	350	ug/kg	
71-43-2	Benzene	ND	35	ug/kg	
108-86-1	Bromobenzene	ND	350	ug/kg	
74-97-5	Bromochloromethane	ND	350	ug/kg	
75-27-4	Bromodichloromethane	ND	140	ug/kg	
75-25-2	Bromoform	ND	140	ug/kg	
74-83-9	Bromomethane	ND	140	ug/kg	
78-93-3	2-Butanone (MEK)	ND	350	ug/kg	
104-51-8	n-Butylbenzene	ND	350	ug/kg	
135-98-8	sec-Butylbenzene	ND	350	ug/kg	
98-06-6	tert-Butylbenzene	ND	350	ug/kg	
75-15-0	Carbon disulfide	ND	350	ug/kg	
56-23-5	Carbon tetrachloride	ND	140	ug/kg	
108-90-7	Chlorobenzene	ND	140	ug/kg	
75-00-3	Chloroethane	ND	350	ug/kg	
67-66-3	Chloroform	ND	140	ug/kg	
74-87-3	Chloromethane	ND	350	ug/kg	
95-49-8	o-Chlorotoluene	ND	350	ug/kg	
106-43-4	p-Chlorotoluene	ND	350	ug/kg	
108-20-3	Di-Isopropyl ether	ND	140	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	350	ug/kg	
124-48-1	Dibromochloromethane	ND	140	ug/kg	
106-93-4	1,2-Dibromoethane	ND	140	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	140	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	140	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	140	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	140	ug/kg	
75-34-3	1,1-Dichloroethane	ND	140	ug/kg	
107-06-2	1,2-Dichloroethane	ND	140	ug/kg	
75-35-4	1,1-Dichloroethene	ND	140	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	140	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	140	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA113_0-4'

Lab Sample ID: M96199-3

Date Sampled: 11/29/10

Matrix: SO - Soil

Date Received: 11/29/10

Method: SW846 8260B

Percent Solids: 83.5

Project: Former Energy International Parcel, MA

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
78-87-5	1,2-Dichloropropane	ND	140	ug/kg	
142-28-9	1,3-Dichloropropane	ND	350	ug/kg	
594-20-7	2,2-Dichloropropane	ND	350	ug/kg	
563-58-6	1,1-Dichloropropene	ND	350	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	140	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	140	ug/kg	
123-91-1	1,4-Dioxane	ND	1700	ug/kg	
60-29-7	Ethyl Ether	ND	350	ug/kg	
100-41-4	Ethylbenzene	ND	140	ug/kg	
87-68-3	Hexachlorobutadiene	ND	350	ug/kg	
591-78-6	2-Hexanone	ND	350	ug/kg	
98-82-8	Isopropylbenzene	ND	350	ug/kg	
99-87-6	p-Isopropyltoluene	ND	350	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	140	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	350	ug/kg	
74-95-3	Methylene bromide	ND	350	ug/kg	
75-09-2	Methylene chloride	ND	140	ug/kg	
91-20-3	Naphthalene	ND	350	ug/kg	
103-65-1	n-Propylbenzene	ND	350	ug/kg	
100-42-5	Styrene	ND	350	ug/kg	
994-05-8	tert-Amyl Methyl Ether	ND	350	ug/kg	
637-92-3	tert-Butyl Ethyl Ether	ND	140	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	350	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	140	ug/kg	
127-18-4	Tetrachloroethene	ND	140	ug/kg	
109-99-9	Tetrahydrofuran	ND	700	ug/kg	
108-88-3	Toluene	ND	350	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	350	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	350	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	140	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	140	ug/kg	
79-01-6	Trichloroethene	ND	140	ug/kg	
75-69-4	Trichlorofluoromethane	ND	140	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	350	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	350	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	350	ug/kg	
75-01-4	Vinyl chloride	ND	140	ug/kg	
	m,p-Xylene	ND	140	ug/kg	
95-47-6	o-Xylene	ND	140	ug/kg	
1330-20-7	Xylene (total)	ND	140	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA113_0-4'	Date Sampled:	11/29/10
Lab Sample ID:	M96199-3	Date Received:	11/29/10
Matrix:	SO - Soil	Percent Solids:	83.5
Method:	SW846 8260B		
Project:	Former Energy International Parcel, MA		

VOA MCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		70-130%
2037-26-5	Toluene-D8	111%		70-130%
460-00-4	4-Bromofluorobenzene	108%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA113_0-4'	Date Sampled:	11/29/10
Lab Sample ID:	M96199-3	Date Received:	11/29/10
Matrix:	SO - Soil	Percent Solids:	83.5
Method:	SW846 8270C SW846 3545		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	S19770.D	1	12/06/10	PR	12/03/10	OP23515	MSS816
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.8 g	1.0 ml
Run #2		

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
65-85-0	Benzoic acid	ND	580	ug/kg	
95-57-8	2-Chlorophenol	ND	290	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	580	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	580	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	580	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1200	ug/kg	
95-48-7	2-Methylphenol	ND	580	ug/kg	
	3&4-Methylphenol	ND	580	ug/kg	
88-75-5	2-Nitrophenol	ND	580	ug/kg	
100-02-7	4-Nitrophenol	ND	1200	ug/kg	
87-86-5	Pentachlorophenol	ND	580	ug/kg	
108-95-2	Phenol	ND	290	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	580	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	580	ug/kg	
83-32-9	Acenaphthene	654	290	ug/kg	
208-96-8	Acenaphthylene	588	290	ug/kg	
98-86-2	Acetophenone	ND	580	ug/kg	
62-53-3	Aniline	ND	580	ug/kg	
120-12-7	Anthracene	1860	290	ug/kg	
56-55-3	Benzo(a)anthracene	3810	290	ug/kg	
50-32-8	Benzo(a)pyrene	3060	290	ug/kg	
205-99-2	Benzo(b)fluoranthene	3230	290	ug/kg	
191-24-2	Benzo(g,h,i)perylene	1560	290	ug/kg	
207-08-9	Benzo(k)fluoranthene	2650	290	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	290	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	290	ug/kg	
91-58-7	2-Chloronaphthalene	ND	290	ug/kg	
106-47-8	4-Chloroaniline	ND	580	ug/kg	
218-01-9	Chrysene	4280	290	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	290	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	290	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	290	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA113_0-4'	Date Sampled:	11/29/10
Lab Sample ID:	M96199-3	Date Received:	11/29/10
Matrix:	SO - Soil	Percent Solids:	83.5
Method:	SW846 8270C SW846 3545		
Project:	Former Energy International Parcel, MA		

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	290	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	290	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	290	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	290	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	580	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	580	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	290	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	664	290	ug/kg	
132-64-9	Dibenzofuran	685	290	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	290	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	290	ug/kg	
84-66-2	Diethyl phthalate	ND	290	ug/kg	
131-11-3	Dimethyl phthalate	ND	290	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	290	ug/kg	
206-44-0	Fluoranthene	7520	290	ug/kg	
86-73-7	Fluorene	804	290	ug/kg	
118-74-1	Hexachlorobenzene	ND	290	ug/kg	
87-68-3	Hexachlorobutadiene	ND	290	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	580	ug/kg	
67-72-1	Hexachloroethane	ND	290	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	1750	290	ug/kg	
78-59-1	Isophorone	ND	290	ug/kg	
91-57-6	2-Methylnaphthalene	346	290	ug/kg	
91-20-3	Naphthalene	581	290	ug/kg	
98-95-3	Nitrobenzene	ND	290	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	290	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	290	ug/kg	
85-01-8	Phenanthrene	6490	290	ug/kg	
129-00-0	Pyrene	5480	290	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	290	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	56%		30-130%
4165-62-2	Phenol-d5	57%		30-130%
118-79-6	2,4,6-Tribromophenol	79%		30-130%
4165-60-0	Nitrobenzene-d5	57%		30-130%
321-60-8	2-Fluorobiphenyl	64%		30-130%
1718-51-0	Terphenyl-d14	65%		30-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA113_0-4'	Date Sampled:	11/29/10
Lab Sample ID:	M96199-3	Date Received:	11/29/10
Matrix:	SO - Soil	Percent Solids:	83.5
Method:	MADEP VPH REV 1.1		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BH17788.D	1	12/06/10	AP	n/a	n/a	GBH926
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	10.0 g	11.0 ml	100 ul
Run #2			

Volatile TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C5- C8 Aliphatics (Unadj.)	ND	7600	ug/kg	
	C9- C12 Aliphatics (Unadj.)	ND	7600	ug/kg	
	C9- C10 Aromatics (Unadj.)	ND	7600	ug/kg	
	C5- C8 Aliphatics	ND	7600	ug/kg	
	C9- C12 Aliphatics	ND	7600	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	103%		70-130%
615-59-8	2,5-Dibromotoluene	96%		70-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA113_0-4'	Date Sampled:	11/29/10
Lab Sample ID:	M96199-3	Date Received:	11/29/10
Matrix:	SO - Soil	Percent Solids:	83.5
Method:	MADEP EPH REV 1.1 SW846 3550B		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BG23602.D	1	12/08/10	AL	12/02/10	OP23505	GBG777
Run #2							

	Initial Weight	Final Volume
Run #1	11.4 g	2.0 ml
Run #2		

Extractable TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C11-C22 Aromatics (Unadj.)	168000	21000	ug/kg	
	C9-C18 Aliphatics	102000	10000	ug/kg	
	C19-C36 Aliphatics	281000	10000	ug/kg	
	C11-C22 Aromatics	157000	21000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	63%		40-140%
321-60-8	2-Fluorobiphenyl	97%		40-140%
580-13-2	2-Bromonaphthalene	80%		40-140%
3386-33-2	1-Chlorooctadecane	26% ^a		40-140%

(a) Outside control limits due to possible matrix interference. Confirmed by refractionation.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA113_0-4'

Lab Sample ID: M96199-3

Matrix: SO - Soil

Date Sampled: 11/29/10

Date Received: 11/29/10

Percent Solids: 83.5

Project: Former Energy International Parcel, MA

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Antimony	1.6	0.90	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Arsenic	8.5	0.90	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Barium	91.3	4.5	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Beryllium	0.45	0.36	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Cadmium	3.3	0.36	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Chromium	18.8	0.90	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Lead	296	0.90	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Mercury	1.0	0.035	mg/kg	1	12/03/10	12/03/10 PY	SW846 7471A ¹	SW846 7471A ⁴
Nickel	21.6	3.6	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Selenium	1.1	0.90	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Silver	< 0.45	0.45	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Thallium	< 0.90	0.90	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Vanadium	29.2	0.90	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Zinc	645	1.8	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³

(1) Instrument QC Batch: MA12492

(2) Instrument QC Batch: MA12497

(3) Prep QC Batch: MP16325

(4) Prep QC Batch: MP16331

RL = Reporting Limit

Report of Analysis

Client Sample ID: HA113_0-4'**Lab Sample ID:** M96199-3**Matrix:** SO - Soil**Date Sampled:** 11/29/10**Date Received:** 11/29/10**Percent Solids:** 83.5**Project:** Former Energy International Parcel, MA

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Corrosivity as pH	7.2			1	11/30/10	MA	SW846 CHAP7
Cyanide Reactivity	< 1.8	1.8	mg/kg	1	12/06/10	BF	SW846 CHAP7
Ignitability (Flashpoint)	> 230		Deg. F	1	12/02/10	BF	SW846 1020
Redox Potential Vs H2 ^a	391		mv	1	12/03/10	MC	ASTM D1498-76M
Solids, Percent	83.5		%	1	12/01/10	HS	SM21 2540 B MOD.
Sulfide Reactivity	< 60	60	mg/kg	1	12/06/10	BF	SW846 CHAP7
pH	7.2		su	1	11/30/10	MA	SW846 9045

(a) Analysis requested after recommended holding time.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HA113_0-4'	Date Sampled:	11/29/10
Lab Sample ID:	M96199-3A	Date Received:	11/29/10
Matrix:	SO - Soil	Percent Solids:	83.5
Project:	Former Energy International Parcel, MA		

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	0.28	D008	5.0	0.010	mg/l	1	12/09/10	12/09/10 DA	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA12508
(2) Prep QC Batch: MP16354

RL = Reporting Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)

Report of Analysis

Client Sample ID:	HA113_12-15.5'	Date Sampled:	11/29/10
Lab Sample ID:	M96199-4	Date Received:	11/29/10
Matrix:	SO - Soil	Percent Solids:	79.5
Method:	SW846 8260B		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R18619.D	1	12/07/10	GK	n/a	n/a	MSR663
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	8.42 g	10.0 ml	100 ul
Run #2			

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	440	ug/kg	
71-43-2	Benzene	ND	44	ug/kg	
108-86-1	Bromobenzene	ND	440	ug/kg	
74-97-5	Bromochloromethane	ND	440	ug/kg	
75-27-4	Bromodichloromethane	ND	180	ug/kg	
75-25-2	Bromoform	ND	180	ug/kg	
74-83-9	Bromomethane	ND	180	ug/kg	
78-93-3	2-Butanone (MEK)	ND	440	ug/kg	
104-51-8	n-Butylbenzene	ND	440	ug/kg	
135-98-8	sec-Butylbenzene	ND	440	ug/kg	
98-06-6	tert-Butylbenzene	ND	440	ug/kg	
75-15-0	Carbon disulfide	ND	440	ug/kg	
56-23-5	Carbon tetrachloride	ND	180	ug/kg	
108-90-7	Chlorobenzene	ND	180	ug/kg	
75-00-3	Chloroethane	ND	440	ug/kg	
67-66-3	Chloroform	ND	180	ug/kg	
74-87-3	Chloromethane	ND	440	ug/kg	
95-49-8	o-Chlorotoluene	ND	440	ug/kg	
106-43-4	p-Chlorotoluene	ND	440	ug/kg	
108-20-3	Di-Isopropyl ether	ND	180	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	440	ug/kg	
124-48-1	Dibromochloromethane	ND	180	ug/kg	
106-93-4	1,2-Dibromoethane	ND	180	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	180	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	180	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	180	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	180	ug/kg	
75-34-3	1,1-Dichloroethane	ND	180	ug/kg	
107-06-2	1,2-Dichloroethane	ND	180	ug/kg	
75-35-4	1,1-Dichloroethene	ND	180	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	180	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	180	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA113_12-15.5'

Lab Sample ID: M96199-4

Date Sampled: 11/29/10

Matrix: SO - Soil

Date Received: 11/29/10

Method: SW846 8260B

Percent Solids: 79.5

Project: Former Energy International Parcel, MA

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
78-87-5	1,2-Dichloropropane	ND	180	ug/kg	
142-28-9	1,3-Dichloropropane	ND	440	ug/kg	
594-20-7	2,2-Dichloropropane	ND	440	ug/kg	
563-58-6	1,1-Dichloropropene	ND	440	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	180	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	180	ug/kg	
123-91-1	1,4-Dioxane	ND	2200	ug/kg	
60-29-7	Ethyl Ether	ND	440	ug/kg	
100-41-4	Ethylbenzene	ND	180	ug/kg	
87-68-3	Hexachlorobutadiene	ND	440	ug/kg	
591-78-6	2-Hexanone	ND	440	ug/kg	
98-82-8	Isopropylbenzene	ND	440	ug/kg	
99-87-6	p-Isopropyltoluene	ND	440	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	180	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	440	ug/kg	
74-95-3	Methylene bromide	ND	440	ug/kg	
75-09-2	Methylene chloride	ND	180	ug/kg	
91-20-3	Naphthalene	1860	440	ug/kg	
103-65-1	n-Propylbenzene	ND	440	ug/kg	
100-42-5	Styrene	ND	440	ug/kg	
994-05-8	tert-Amyl Methyl Ether	ND	440	ug/kg	
637-92-3	tert-Butyl Ethyl Ether	ND	180	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	440	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	180	ug/kg	
127-18-4	Tetrachloroethene	ND	180	ug/kg	
109-99-9	Tetrahydrofuran	ND	880	ug/kg	
108-88-3	Toluene	ND	440	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	440	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	440	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	180	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	180	ug/kg	
79-01-6	Trichloroethene	ND	180	ug/kg	
75-69-4	Trichlorofluoromethane	ND	180	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	440	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	440	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	440	ug/kg	
75-01-4	Vinyl chloride	ND	180	ug/kg	
	m,p-Xylene	ND	180	ug/kg	
95-47-6	o-Xylene	ND	180	ug/kg	
1330-20-7	Xylene (total)	ND	180	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA113_12-15.5'**Lab Sample ID:** M96199-4**Matrix:** SO - Soil**Method:** SW846 8260B**Project:** Former Energy International Parcel, MA**Date Sampled:** 11/29/10**Date Received:** 11/29/10**Percent Solids:** 79.5

VOA MCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	112%		70-130%
2037-26-5	Toluene-D8	110%		70-130%
460-00-4	4-Bromofluorobenzene	107%		70-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA113_12-15.5'

Lab Sample ID: M96199-4

Date Sampled: 11/29/10

Matrix: SO - Soil

Date Received: 11/29/10

Method: SW846 8270C SW846 3545

Percent Solids: 79.5

Project: Former Energy International Parcel, MA

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	S19771.D	1	12/07/10	PR	12/03/10	OP23515	MSS816
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.3 g	1.0 ml
Run #2		

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
65-85-0	Benzoic acid	ND	620	ug/kg	
95-57-8	2-Chlorophenol	ND	310	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	620	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	620	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	620	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1200	ug/kg	
95-48-7	2-Methylphenol	ND	620	ug/kg	
	3&4-Methylphenol	ND	620	ug/kg	
88-75-5	2-Nitrophenol	ND	620	ug/kg	
100-02-7	4-Nitrophenol	ND	1200	ug/kg	
87-86-5	Pentachlorophenol	ND	620	ug/kg	
108-95-2	Phenol	ND	310	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	620	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	620	ug/kg	
83-32-9	Acenaphthene	ND	310	ug/kg	
208-96-8	Acenaphthylene	ND	310	ug/kg	
98-86-2	Acetophenone	ND	620	ug/kg	
62-53-3	Aniline	ND	620	ug/kg	
120-12-7	Anthracene	527	310	ug/kg	
56-55-3	Benzo(a)anthracene	750	310	ug/kg	
50-32-8	Benzo(a)pyrene	554	310	ug/kg	
205-99-2	Benzo(b)fluoranthene	464	310	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	310	ug/kg	
207-08-9	Benzo(k)fluoranthene	456	310	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	310	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	310	ug/kg	
91-58-7	2-Chloronaphthalene	ND	310	ug/kg	
106-47-8	4-Chloroaniline	ND	620	ug/kg	
218-01-9	Chrysene	784	310	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	310	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	310	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	310	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA113_12-15.5'		
Lab Sample ID:	M96199-4	Date Sampled:	11/29/10
Matrix:	SO - Soil	Date Received:	11/29/10
Method:	SW846 8270C SW846 3545	Percent Solids:	79.5
Project:	Former Energy International Parcel, MA		

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	310	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	310	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	310	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	310	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	620	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	620	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	310	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	310	ug/kg	
132-64-9	Dibenzofuran	ND	310	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	310	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	310	ug/kg	
84-66-2	Diethyl phthalate	ND	310	ug/kg	
131-11-3	Dimethyl phthalate	ND	310	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	310	ug/kg	
206-44-0	Fluoranthene	1490	310	ug/kg	
86-73-7	Fluorene	357	310	ug/kg	
118-74-1	Hexachlorobenzene	ND	310	ug/kg	
87-68-3	Hexachlorobutadiene	ND	310	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	620	ug/kg	
67-72-1	Hexachloroethane	ND	310	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	310	ug/kg	
78-59-1	Isophorone	ND	310	ug/kg	
91-57-6	2-Methylnaphthalene	ND	310	ug/kg	
91-20-3	Naphthalene	1710	310	ug/kg	
98-95-3	Nitrobenzene	ND	310	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	310	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	310	ug/kg	
85-01-8	Phenanthrene	1330	310	ug/kg	
129-00-0	Pyrene	1070	310	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	310	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	60%		30-130%
4165-62-2	Phenol-d5	61%		30-130%
118-79-6	2,4,6-Tribromophenol	84%		30-130%
4165-60-0	Nitrobenzene-d5	54%		30-130%
321-60-8	2-Fluorobiphenyl	67%		30-130%
1718-51-0	Terphenyl-d14	70%		30-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA113_12-15.5'	Date Sampled:	11/29/10
Lab Sample ID:	M96199-4	Date Received:	11/29/10
Matrix:	SO - Soil	Percent Solids:	79.5
Method:	MADEP VPH REV 1.1		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BH17789.D	1	12/06/10	AP	n/a	n/a	GBH926
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	8.42 g	11.0 ml	100 ul
Run #2			

Volatile TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C5- C8 Aliphatics (Unadj.)	ND	9500	ug/kg	
	C9- C12 Aliphatics (Unadj.)	ND	9500	ug/kg	
	C9- C10 Aromatics (Unadj.)	ND	9500	ug/kg	
	C5- C8 Aliphatics	ND	9500	ug/kg	
	C9- C12 Aliphatics	ND	9500	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	114%		70-130%
615-59-8	2,5-Dibromotoluene	107%		70-130%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA113_12-15.5'	Date Sampled:	11/29/10
Lab Sample ID:	M96199-4	Date Received:	11/29/10
Matrix:	SO - Soil	Percent Solids:	79.5
Method:	MADEP EPH REV 1.1 SW846 3550B		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BJ74.D	1	12/04/10	KD	12/02/10	OP23505	GBJ2
Run #2							

	Initial Weight	Final Volume
Run #1	11.7 g	2.0 ml
Run #2		

Extractable TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C11-C22 Aromatics (Unadj.)	139000	22000	ug/kg	
	C9-C18 Aliphatics	23200	11000	ug/kg	
	C19-C36 Aliphatics	63100	11000	ug/kg	
	C11-C22 Aromatics	122000	22000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	103%		40-140%
321-60-8	2-Fluorobiphenyl	87%		40-140%
580-13-2	2-Bromonaphthalene	82%		40-140%
3386-33-2	1-Chlorooctadecane	61%		40-140%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA113_12-15.5'**Lab Sample ID:** M96199-4**Matrix:** SO - Soil**Date Sampled:** 11/29/10**Date Received:** 11/29/10**Percent Solids:** 79.5**Project:** Former Energy International Parcel, MA**Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Antimony	< 0.90	0.90	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ⁴
Arsenic	5.0	0.90	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ⁴
Barium	29.8	4.5	mg/kg	1	12/01/10	12/07/10 DA	SW846 6010C ³	SW846 3050B ⁴
Beryllium	0.46	0.36	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ⁴
Cadmium	< 0.36	0.36	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ⁴
Chromium	18.5	0.90	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ⁴
Lead	40.4	0.90	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ⁴
Mercury	0.52	0.037	mg/kg	1	12/03/10	12/03/10 PY	SW846 7471A ¹	SW846 7471A ⁵
Nickel	11.3	3.6	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ⁴
Selenium	< 0.90	0.90	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ⁴
Silver	< 0.45	0.45	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ⁴
Thallium	< 0.90	0.90	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ⁴
Vanadium	23.6	0.90	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ⁴
Zinc	46.0	1.8	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ⁴

(1) Instrument QC Batch: MA12492

(2) Instrument QC Batch: MA12497

(3) Instrument QC Batch: MA12501

(4) Prep QC Batch: MP16325

(5) Prep QC Batch: MP16331

RL = Reporting Limit

Report of Analysis

Client Sample ID: HA113_12-15.5'**Lab Sample ID:** M96199-4**Matrix:** SO - Soil**Date Sampled:** 11/29/10**Date Received:** 11/29/10**Percent Solids:** 79.5**Project:** Former Energy International Parcel, MA

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Corrosivity as pH	8.1			1	11/30/10	MA	SW846 CHAP7
Cyanide Reactivity	< 1.9	1.9	mg/kg	1	12/06/10	BF	SW846 CHAP7
Ignitability (Flashpoint)	> 230		Deg. F	1	12/02/10	BF	SW846 1020
Redox Potential Vs H2 ^a	361		mv	1	12/03/10	MC	ASTM D1498-76M
Solids, Percent	79.5		%	1	12/01/10	HS	SM21 2540 B MOD.
Sulfide Reactivity	< 63	63	mg/kg	1	12/06/10	BF	SW846 CHAP7
pH	8.1		su	1	11/30/10	MA	SW846 9045

(a) Analysis requested after recommended holding time.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HA111_0-4'	Date Sampled:	11/29/10
Lab Sample ID:	M96199-5	Date Received:	11/29/10
Matrix:	SO - Soil	Percent Solids:	89.1
Method:	SW846 8260B		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R18620.D	1	12/07/10	GK	n/a	n/a	MSR663
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	11.4 g	10.0 ml	100 ul
Run #2			

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	280	ug/kg	
71-43-2	Benzene	ND	28	ug/kg	
108-86-1	Bromobenzene	ND	280	ug/kg	
74-97-5	Bromochloromethane	ND	280	ug/kg	
75-27-4	Bromodichloromethane	ND	110	ug/kg	
75-25-2	Bromoform	ND	110	ug/kg	
74-83-9	Bromomethane	ND	110	ug/kg	
78-93-3	2-Butanone (MEK)	ND	280	ug/kg	
104-51-8	n-Butylbenzene	ND	280	ug/kg	
135-98-8	sec-Butylbenzene	ND	280	ug/kg	
98-06-6	tert-Butylbenzene	ND	280	ug/kg	
75-15-0	Carbon disulfide	ND	280	ug/kg	
56-23-5	Carbon tetrachloride	ND	110	ug/kg	
108-90-7	Chlorobenzene	ND	110	ug/kg	
75-00-3	Chloroethane	ND	280	ug/kg	
67-66-3	Chloroform	ND	110	ug/kg	
74-87-3	Chloromethane	ND	280	ug/kg	
95-49-8	o-Chlorotoluene	ND	280	ug/kg	
106-43-4	p-Chlorotoluene	ND	280	ug/kg	
108-20-3	Di-Isopropyl ether	ND	110	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	280	ug/kg	
124-48-1	Dibromochloromethane	ND	110	ug/kg	
106-93-4	1,2-Dibromoethane	ND	110	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	110	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	110	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	110	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	110	ug/kg	
75-34-3	1,1-Dichloroethane	ND	110	ug/kg	
107-06-2	1,2-Dichloroethane	ND	110	ug/kg	
75-35-4	1,1-Dichloroethene	ND	110	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	110	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	110	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA111_0-4'	Date Sampled:	11/29/10
Lab Sample ID:	M96199-5	Date Received:	11/29/10
Matrix:	SO - Soil	Percent Solids:	89.1
Method:	SW846 8260B		
Project:	Former Energy International Parcel, MA		

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
78-87-5	1,2-Dichloropropane	ND	110	ug/kg	
142-28-9	1,3-Dichloropropane	ND	280	ug/kg	
594-20-7	2,2-Dichloropropane	ND	280	ug/kg	
563-58-6	1,1-Dichloropropene	ND	280	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	110	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	110	ug/kg	
123-91-1	1,4-Dioxane	ND	1400	ug/kg	
60-29-7	Ethyl Ether	ND	280	ug/kg	
100-41-4	Ethylbenzene	ND	110	ug/kg	
87-68-3	Hexachlorobutadiene	ND	280	ug/kg	
591-78-6	2-Hexanone	ND	280	ug/kg	
98-82-8	Isopropylbenzene	ND	280	ug/kg	
99-87-6	p-Isopropyltoluene	ND	280	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	110	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	280	ug/kg	
74-95-3	Methylene bromide	ND	280	ug/kg	
75-09-2	Methylene chloride	ND	110	ug/kg	
91-20-3	Naphthalene	ND	280	ug/kg	
103-65-1	n-Propylbenzene	ND	280	ug/kg	
100-42-5	Styrene	ND	280	ug/kg	
994-05-8	tert-Amyl Methyl Ether	ND	280	ug/kg	
637-92-3	tert-Butyl Ethyl Ether	ND	110	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	280	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	110	ug/kg	
127-18-4	Tetrachloroethene	ND	110	ug/kg	
109-99-9	Tetrahydrofuran	ND	550	ug/kg	
108-88-3	Toluene	ND	280	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	280	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	280	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	110	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	110	ug/kg	
79-01-6	Trichloroethene	ND	110	ug/kg	
75-69-4	Trichlorofluoromethane	ND	110	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	280	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	280	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	280	ug/kg	
75-01-4	Vinyl chloride	ND	110	ug/kg	
	m,p-Xylene	ND	110	ug/kg	
95-47-6	o-Xylene	ND	110	ug/kg	
1330-20-7	Xylene (total)	ND	110	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA111_0-4'**Lab Sample ID:** M96199-5**Matrix:** SO - Soil**Method:** SW846 8260B**Project:** Former Energy International Parcel, MA**Date Sampled:** 11/29/10**Date Received:** 11/29/10**Percent Solids:** 89.1

VOA MCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	113%		70-130%
2037-26-5	Toluene-D8	111%		70-130%
460-00-4	4-Bromofluorobenzene	111%		70-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA111_0-4'	Date Sampled:	11/29/10
Lab Sample ID:	M96199-5	Date Received:	11/29/10
Matrix:	SO - Soil	Percent Solids:	89.1
Method:	SW846 8270C SW846 3545		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	S19772.D	1	12/07/10	PR	12/03/10	OP23515	MSS816
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.4 g	1.0 ml
Run #2		

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
65-85-0	Benzoic acid	ND	550	ug/kg	
95-57-8	2-Chlorophenol	ND	280	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	550	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	550	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	550	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1100	ug/kg	
95-48-7	2-Methylphenol	ND	550	ug/kg	
	3&4-Methylphenol	ND	550	ug/kg	
88-75-5	2-Nitrophenol	ND	550	ug/kg	
100-02-7	4-Nitrophenol	ND	1100	ug/kg	
87-86-5	Pentachlorophenol	ND	550	ug/kg	
108-95-2	Phenol	ND	280	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	550	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	550	ug/kg	
83-32-9	Acenaphthene	ND	280	ug/kg	
208-96-8	Acenaphthylene	ND	280	ug/kg	
98-86-2	Acetophenone	ND	550	ug/kg	
62-53-3	Aniline	ND	550	ug/kg	
120-12-7	Anthracene	536	280	ug/kg	
56-55-3	Benzo(a)anthracene	1660	280	ug/kg	
50-32-8	Benzo(a)pyrene	1390	280	ug/kg	
205-99-2	Benzo(b)fluoranthene	1310	280	ug/kg	
191-24-2	Benzo(g,h,i)perylene	672	280	ug/kg	
207-08-9	Benzo(k)fluoranthene	1130	280	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	280	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	280	ug/kg	
91-58-7	2-Chloronaphthalene	ND	280	ug/kg	
106-47-8	4-Chloroaniline	ND	550	ug/kg	
218-01-9	Chrysene	1760	280	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	280	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	280	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	280	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA111_0-4'	Date Sampled:	11/29/10
Lab Sample ID:	M96199-5	Date Received:	11/29/10
Matrix:	SO - Soil	Percent Solids:	89.1
Method:	SW846 8270C SW846 3545		
Project:	Former Energy International Parcel, MA		

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	280	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	280	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	280	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	280	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	550	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	550	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	280	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	314	280	ug/kg	
132-64-9	Dibenzofuran	ND	280	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	280	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	280	ug/kg	
84-66-2	Diethyl phthalate	ND	280	ug/kg	
131-11-3	Dimethyl phthalate	ND	280	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	280	ug/kg	
206-44-0	Fluoranthene	2940	280	ug/kg	
86-73-7	Fluorene	ND	280	ug/kg	
118-74-1	Hexachlorobenzene	ND	280	ug/kg	
87-68-3	Hexachlorobutadiene	ND	280	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	550	ug/kg	
67-72-1	Hexachloroethane	ND	280	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	735	280	ug/kg	
78-59-1	Isophorone	ND	280	ug/kg	
91-57-6	2-Methylnaphthalene	ND	280	ug/kg	
91-20-3	Naphthalene	ND	280	ug/kg	
98-95-3	Nitrobenzene	ND	280	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	280	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	280	ug/kg	
85-01-8	Phenanthrene	2100	280	ug/kg	
129-00-0	Pyrene	2330	280	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	280	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	57%		30-130%
4165-62-2	Phenol-d5	59%		30-130%
118-79-6	2,4,6-Tribromophenol	80%		30-130%
4165-60-0	Nitrobenzene-d5	60%		30-130%
321-60-8	2-Fluorobiphenyl	66%		30-130%
1718-51-0	Terphenyl-d14	73%		30-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA111_0-4'	Date Sampled:	11/29/10
Lab Sample ID:	M96199-5	Date Received:	11/29/10
Matrix:	SO - Soil	Percent Solids:	89.1
Method:	MADEP VPH REV 1.1		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BH17790.D	1	12/06/10	AP	n/a	n/a	GBH926
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	11.4 g	11.0 ml	100 ul
Run #2			

Volatile TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C5- C8 Aliphatics (Unadj.)	ND	6000	ug/kg	
	C9- C12 Aliphatics (Unadj.)	ND	6000	ug/kg	
	C9- C10 Aromatics (Unadj.)	ND	6000	ug/kg	
	C5- C8 Aliphatics	ND	6000	ug/kg	
	C9- C12 Aliphatics	ND	6000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	95%		70-130%
615-59-8	2,5-Dibromotoluene	88%		70-130%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA111_0-4'	Date Sampled:	11/29/10
Lab Sample ID:	M96199-5	Date Received:	11/29/10
Matrix:	SO - Soil	Percent Solids:	89.1
Method:	MADEP EPH REV 1.1 SW846 3550B		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BJ75.D	1	12/04/10	KD	12/02/10	OP23505	GBJ2
Run #2							

	Initial Weight	Final Volume
Run #1	11.9 g	2.0 ml
Run #2		

Extractable TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C11-C22 Aromatics (Unadj.)	67400	19000	ug/kg	
	C9-C18 Aliphatics	ND	9400	ug/kg	
	C19-C36 Aliphatics	12000	9400	ug/kg	
	C11-C22 Aromatics	46900	19000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	121%		40-140%
321-60-8	2-Fluorobiphenyl	93%		40-140%
580-13-2	2-Bromonaphthalene	87%		40-140%
3386-33-2	1-Chlorooctadecane	74%		40-140%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA111_0-4'

Lab Sample ID: M96199-5

Matrix: SO - Soil

Date Sampled: 11/29/10

Date Received: 11/29/10

Percent Solids: 89.1

Project: Former Energy International Parcel, MA

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Antimony	2.4	0.84	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ⁴
Arsenic	18.9	0.84	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ⁴
Barium	198	4.2	mg/kg	1	12/01/10	12/07/10 DA	SW846 6010C ³	SW846 3050B ⁴
Beryllium	0.65	0.34	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ⁴
Cadmium	0.54	0.34	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ⁴
Chromium	17.6	0.84	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ⁴
Lead	912	0.84	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ⁴
Mercury	0.53	0.034	mg/kg	1	12/03/10	12/03/10 PY	SW846 7471A ¹	SW846 7471A ⁵
Nickel	15.4	3.4	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ⁴
Selenium	0.97	0.84	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ⁴
Silver	< 0.42	0.42	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ⁴
Thallium	< 0.84	0.84	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ⁴
Vanadium	24.6	0.84	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ⁴
Zinc	145	1.7	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ⁴

(1) Instrument QC Batch: MA12492

(2) Instrument QC Batch: MA12497

(3) Instrument QC Batch: MA12501

(4) Prep QC Batch: MP16325

(5) Prep QC Batch: MP16331

RL = Reporting Limit

Report of Analysis

Client Sample ID: HA111_0-4'**Lab Sample ID:** M96199-5**Matrix:** SO - Soil**Date Sampled:** 11/29/10**Date Received:** 11/29/10**Percent Solids:** 89.1**Project:** Former Energy International Parcel, MA

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Corrosivity as pH	7.7			1	11/30/10	MA	SW846 CHAP7
Cyanide Reactivity	< 1.7	1.7	mg/kg	1	12/06/10	BF	SW846 CHAP7
Ignitability (Flashpoint)	> 230		Deg. F	1	12/02/10	BF	SW846 1020
Redox Potential Vs H2 ^a	402		mv	1	12/03/10	MC	ASTM D1498-76M
Solids, Percent	89.1		%	1	12/01/10	HS	SM21 2540 B MOD.
Sulfide Reactivity	< 56	56	mg/kg	1	12/06/10	BF	SW846 CHAP7
pH	7.7		su	1	11/30/10	MA	SW846 9045

(a) Analysis requested after recommended holding time.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HA111_0-4'	Date Sampled:	11/29/10
Lab Sample ID:	M96199-5A	Date Received:	11/29/10
Matrix:	SO - Soil	Percent Solids:	89.1
Project:	Former Energy International Parcel, MA		

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	0.56	D008	5.0	0.010	mg/l	1	12/09/10	12/09/10 DA	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA12508
(2) Prep QC Batch: MP16354

RL = Reporting Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)

Report of Analysis

Client Sample ID:	HA111_8-12'	Date Sampled:	11/29/10
Lab Sample ID:	M96199-6	Date Received:	11/29/10
Matrix:	SO - Soil	Percent Solids:	67.3
Method:	SW846 8260B		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R18540.D	1	12/02/10	GK	n/a	n/a	MSR660
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	10.3 g	10.0 ml	100 ul
Run #2			

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	480	ug/kg	
71-43-2	Benzene	ND	48	ug/kg	
108-86-1	Bromobenzene	ND	480	ug/kg	
74-97-5	Bromochloromethane	ND	480	ug/kg	
75-27-4	Bromodichloromethane	ND	190	ug/kg	
75-25-2	Bromoform	ND	190	ug/kg	
74-83-9	Bromomethane	ND	190	ug/kg	
78-93-3	2-Butanone (MEK)	ND	480	ug/kg	
104-51-8	n-Butylbenzene	ND	480	ug/kg	
135-98-8	sec-Butylbenzene	ND	480	ug/kg	
98-06-6	tert-Butylbenzene	ND	480	ug/kg	
75-15-0	Carbon disulfide	ND	480	ug/kg	
56-23-5	Carbon tetrachloride	ND	190	ug/kg	
108-90-7	Chlorobenzene	ND	190	ug/kg	
75-00-3	Chloroethane	ND	480	ug/kg	
67-66-3	Chloroform	ND	190	ug/kg	
74-87-3	Chloromethane	ND	480	ug/kg	
95-49-8	o-Chlorotoluene	ND	480	ug/kg	
106-43-4	p-Chlorotoluene	ND	480	ug/kg	
108-20-3	Di-Isopropyl ether	ND	190	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	480	ug/kg	
124-48-1	Dibromochloromethane	ND	190	ug/kg	
106-93-4	1,2-Dibromoethane	ND	190	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	190	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	190	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	190	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	190	ug/kg	
75-34-3	1,1-Dichloroethane	ND	190	ug/kg	
107-06-2	1,2-Dichloroethane	ND	190	ug/kg	
75-35-4	1,1-Dichloroethene	ND	190	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	190	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	190	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA111_8-12'	Date Sampled:	11/29/10
Lab Sample ID:	M96199-6	Date Received:	11/29/10
Matrix:	SO - Soil	Percent Solids:	67.3
Method:	SW846 8260B		
Project:	Former Energy International Parcel, MA		

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
78-87-5	1,2-Dichloropropane	ND	190	ug/kg	
142-28-9	1,3-Dichloropropane	ND	480	ug/kg	
594-20-7	2,2-Dichloropropane	ND	480	ug/kg	
563-58-6	1,1-Dichloropropene	ND	480	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	190	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	190	ug/kg	
123-91-1	1,4-Dioxane	ND	2400	ug/kg	
60-29-7	Ethyl Ether	ND	480	ug/kg	
100-41-4	Ethylbenzene	ND	190	ug/kg	
87-68-3	Hexachlorobutadiene	ND	480	ug/kg	
591-78-6	2-Hexanone	ND	480	ug/kg	
98-82-8	Isopropylbenzene	ND	480	ug/kg	
99-87-6	p-Isopropyltoluene	ND	480	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	190	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	480	ug/kg	
74-95-3	Methylene bromide	ND	480	ug/kg	
75-09-2	Methylene chloride	ND	190	ug/kg	
91-20-3	Naphthalene	1510	480	ug/kg	
103-65-1	n-Propylbenzene	ND	480	ug/kg	
100-42-5	Styrene	ND	480	ug/kg	
994-05-8	tert-Amyl Methyl Ether	ND	480	ug/kg	
637-92-3	tert-Butyl Ethyl Ether	ND	190	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	480	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	190	ug/kg	
127-18-4	Tetrachloroethene	ND	190	ug/kg	
109-99-9	Tetrahydrofuran	ND	960	ug/kg	
108-88-3	Toluene	ND	480	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	480	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	480	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	190	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	190	ug/kg	
79-01-6	Trichloroethene	ND	190	ug/kg	
75-69-4	Trichlorofluoromethane	ND	190	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	480	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	480	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	480	ug/kg	
75-01-4	Vinyl chloride	ND	190	ug/kg	
	m,p-Xylene	ND	190	ug/kg	
95-47-6	o-Xylene	ND	190	ug/kg	
1330-20-7	Xylene (total)	ND	190	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA111_8-12'	Date Sampled:	11/29/10
Lab Sample ID:	M96199-6	Date Received:	11/29/10
Matrix:	SO - Soil	Percent Solids:	67.3
Method:	SW846 8260B		
Project:	Former Energy International Parcel, MA		

VOA MCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	111%		70-130%
2037-26-5	Toluene-D8	111%		70-130%
460-00-4	4-Bromofluorobenzene	110%		70-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA111_8-12'	Date Sampled:	11/29/10
Lab Sample ID:	M96199-6	Date Received:	11/29/10
Matrix:	SO - Soil	Percent Solids:	67.3
Method:	SW846 8270C SW846 3545		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	S19773.D	1	12/07/10	PR	12/03/10	OP23515	MSS816
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.2 g	1.0 ml
Run #2		

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
65-85-0	Benzoic acid	ND	730	ug/kg	
95-57-8	2-Chlorophenol	ND	370	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	730	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	730	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	730	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1500	ug/kg	
95-48-7	2-Methylphenol	ND	730	ug/kg	
	3&4-Methylphenol	850	730	ug/kg	
88-75-5	2-Nitrophenol	ND	730	ug/kg	
100-02-7	4-Nitrophenol	ND	1500	ug/kg	
87-86-5	Pentachlorophenol	ND	730	ug/kg	
108-95-2	Phenol	ND	370	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	730	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	730	ug/kg	
83-32-9	Acenaphthene	1840	370	ug/kg	
208-96-8	Acenaphthylene	651	370	ug/kg	
98-86-2	Acetophenone	ND	730	ug/kg	
62-53-3	Aniline	ND	730	ug/kg	
120-12-7	Anthracene	4850	370	ug/kg	
56-55-3	Benzo(a)anthracene	7650	370	ug/kg	
50-32-8	Benzo(a)pyrene	3890	370	ug/kg	
205-99-2	Benzo(b)fluoranthene	3490	370	ug/kg	
191-24-2	Benzo(g,h,i)perylene	1410	370	ug/kg	
207-08-9	Benzo(k)fluoranthene	2970	370	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	370	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	370	ug/kg	
91-58-7	2-Chloronaphthalene	ND	370	ug/kg	
106-47-8	4-Chloroaniline	ND	730	ug/kg	
218-01-9	Chrysene	7470	370	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	370	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	370	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	370	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA111_8-12'	Date Sampled:	11/29/10
Lab Sample ID:	M96199-6	Date Received:	11/29/10
Matrix:	SO - Soil	Percent Solids:	67.3
Method:	SW846 8270C SW846 3545		
Project:	Former Energy International Parcel, MA		

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	370	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	370	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	370	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	370	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	730	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	730	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	370	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	696	370	ug/kg	
132-64-9	Dibenzofuran	1920	370	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	370	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	370	ug/kg	
84-66-2	Diethyl phthalate	ND	370	ug/kg	
131-11-3	Dimethyl phthalate	ND	370	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	409	370	ug/kg	
206-44-0	Fluoranthene	12100	370	ug/kg	
86-73-7	Fluorene	3130	370	ug/kg	
118-74-1	Hexachlorobenzene	ND	370	ug/kg	
87-68-3	Hexachlorobutadiene	ND	370	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	730	ug/kg	
67-72-1	Hexachloroethane	ND	370	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	1600	370	ug/kg	
78-59-1	Isophorone	ND	370	ug/kg	
91-57-6	2-Methylnaphthalene	1270	370	ug/kg	
91-20-3	Naphthalene	6010	370	ug/kg	
98-95-3	Nitrobenzene	ND	370	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	370	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	370	ug/kg	
85-01-8	Phenanthrene	10400	370	ug/kg	
129-00-0	Pyrene	12100	370	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	370	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	62%		30-130%
4165-62-2	Phenol-d5	64%		30-130%
118-79-6	2,4,6-Tribromophenol	86%		30-130%
4165-60-0	Nitrobenzene-d5	56%		30-130%
321-60-8	2-Fluorobiphenyl	73%		30-130%
1718-51-0	Terphenyl-d14	91%		30-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA111_8-12'	Date Sampled:	11/29/10
Lab Sample ID:	M96199-6	Date Received:	11/29/10
Matrix:	SO - Soil	Percent Solids:	67.3
Method:	MADEP VPH REV 1.1		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BH17791.D	1	12/06/10	AP	n/a	n/a	GBH926
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	10.3 g	11.0 ml	100 ul
Run #2			

Volatile TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C5- C8 Aliphatics (Unadj.)	ND	10000	ug/kg	
	C9- C12 Aliphatics (Unadj.)	ND	10000	ug/kg	
	C9- C10 Aromatics (Unadj.)	ND	10000	ug/kg	
	C5- C8 Aliphatics	ND	10000	ug/kg	
	C9- C12 Aliphatics	ND	10000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	106%		70-130%
615-59-8	2,5-Dibromotoluene	97%		70-130%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA111_8-12'	Date Sampled:	11/29/10
Lab Sample ID:	M96199-6	Date Received:	11/29/10
Matrix:	SO - Soil	Percent Solids:	67.3
Method:	MADEP EPH REV 1.1 SW846 3550B		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BJ76.D	1	12/04/10	KD	12/02/10	OP23505	GBJ2
Run #2							

	Initial Weight	Final Volume
Run #1	11.2 g	2.0 ml
Run #2		

Extractable TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C11-C22 Aromatics (Unadj.)	193000	27000	ug/kg	
	C9-C18 Aliphatics	54500	13000	ug/kg	
	C19-C36 Aliphatics	143000	13000	ug/kg	
	C11-C22 Aromatics	161000	27000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	118%		40-140%
321-60-8	2-Fluorobiphenyl	88%		40-140%
580-13-2	2-Bromonaphthalene	85%		40-140%
3386-33-2	1-Chlorooctadecane	64%		40-140%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA111_8-12'

Lab Sample ID: M96199-6

Matrix: SO - Soil

Date Sampled: 11/29/10

Date Received: 11/29/10

Percent Solids: 67.3

Project: Former Energy International Parcel, MA

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Antimony	< 1.1	1.1	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Arsenic	6.2	1.1	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Barium	55.8	5.5	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Beryllium	0.56	0.44	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Cadmium	< 0.44	0.44	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Chromium	22.0	1.1	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Lead	82.8	1.1	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Mercury	1.4	0.078	mg/kg	2	12/03/10	12/03/10 PY	SW846 7471A ¹	SW846 7471A ⁴
Nickel	14.1	4.4	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Selenium	< 1.1	1.1	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Silver	< 0.55	0.55	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Thallium	< 1.1	1.1	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Vanadium	28.3	1.1	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Zinc	70.3	2.2	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³

(1) Instrument QC Batch: MA12492

(2) Instrument QC Batch: MA12497

(3) Prep QC Batch: MP16325

(4) Prep QC Batch: MP16331

RL = Reporting Limit

Report of Analysis

Client Sample ID: HA111_8-12'**Lab Sample ID:** M96199-6**Matrix:** SO - Soil**Date Sampled:** 11/29/10**Date Received:** 11/29/10**Percent Solids:** 67.3**Project:** Former Energy International Parcel, MA**General Chemistry**

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Corrosivity as pH	8.0			1	11/30/10	MA	SW846 CHAP7
Cyanide Reactivity	< 2.2	2.2	mg/kg	1	12/06/10	BF	SW846 CHAP7
Ignitability (Flashpoint)	> 230		Deg. F	1	12/02/10	BF	SW846 1020
Redox Potential Vs H2 ^a	326		mv	1	12/03/10	MC	ASTM D1498-76M
Solids, Percent	67.3		%	1	12/01/10	HS	SM21 2540 B MOD.
Sulfide Reactivity	< 74	74	mg/kg	1	12/06/10	BF	SW846 CHAP7
pH	8.0		su	1	11/30/10	MA	SW846 9045

(a) Analysis requested after recommended holding time.

RL = Reporting Limit

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Parameter Certifications (MA)
- Chain of Custody
- MCP Form
- EPH Form
- VPH Form
- Sample Tracking Chronicle

Parameter Certification Exceptions

Job Number: M96199
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

The following parameters included in this report are exceptions to NELAC certification.
The certification status of each is indicated below.

Parameter	CAS#	Method	Mat	Certification Status
tert-Amyl Methyl Ether	994-05-8	SW846 8260B	SO	Certified by SOP MMS105/GC-MS
tert-Butyl Ethyl Ether	637-92-3	SW846 8260B	SO	Certified by SOP MMS105/GC-MS
Di-Isopropyl ether	108-20-3	SW846 8260B	SO	Certified by SOP MMS105/GC-MS
Tetrahydrofuran	109-99-9	SW846 8260B	SO	Certified by SOP MMS105/GC-MS

CHAIN OF CUSTODY RECORD

Phone (617) 886-7400
Fax (617) 886-7600

Page 1 of 1

H&A FILE NO. 0631B-502

PROJECT NAME Palmer Energy International Parcel

H&A CONTACT J. Kellman

LABORATORY Accutest

ADDRESS Marlborough, MA

CONTACT K. Gibbons

DELIVERY DATE 11/29/10

TURNAROUND TIME 10 Days

PROJECT MANAGER Cole Worthy

Sample No.	Date	Time	Depth	Type	Analysis Requested												Number of Containers	Comments (special instructions, precautions, additional method numbers, etc.)											
					① VOA	② ALMS	③ MCP Metals	④ PCBs	⑤ VPH	⑥ TSP	⑦ TSS	⑧ TSS (spec)	⑨ TSS (spec)	⑩ TSS (spec)	⑪ TSS (spec)	⑫ TSS (spec)													
HA112-0-4-1	11/29/10	0825	0-4'	Soil	X	X	X	X	X	X	X	X	X	X	4	M96199 Laboratory to use applicable DEP CAM methods, unless otherwise directed. ① VOA 8260 ② SW-8270 ③ Metals EPA 6010 + 7470 ④ VPH Changes WHEP 04-1 ⑤ EPA Changes WHEP 04-1 ⑥ Waste Characteristics													
HA112-4-8-2		0900	4-8'		X	X	X	X	X	X	X	X	X	X	4														
HA113-0-4-3		1125	0-4'		X	X	X	X	X	X	X	X	X	X	4														
HA113-12-15-4		1250	12-15'		X	X	X	X	X	X	X	X	X	X	4														
HA111-0-4-5		1400	0-4'		X	X	X	X	X	X	X	X	X	X	4														
HA111-8-12-6		1505	8-12'		X	X	X	X	X	X	X	X	X	X	4														
Sampled and Relinquished by					Received by					LIQUID					Sampling Comments														
Sign [Signature]					Sign [Signature]					VOA Vial					If metals exceeds 20x RPA														
Print Matthew Dodson					Print [Signature]					Amber Glass					run TCLP limit														
Firm H&A					Firm					Plastic Bottle					H&A 30 mg/kg run Hex Cr														
Date 11/29/10 Time 1615					Date 11-29-10 Time 1615					Preservative					and other necessary														
Relinquished by					Received by					SOLID					Evidence samples were tampered with? YES NO														
Sign [Signature]					Sign [Signature]					VOA Vial					If YES, please explain in section below.														
Print WAYNE MORIN					Print [Signature]					Amber Glass																			
Firm					Firm					Clear Glass																			
Date 11-29-10 Time 1715					Date 11-29-10 Time 1715					Preservative																			
Relinquished by					Received by					PRESERVATION KEY																			
Sign					Sign					A Sample chilled					C NaOH														
Print					Print					B Sample filtered					D HNO ₃														
Firm					Firm					E H ₂ SO ₄					G Methanol														
Date					Date					F IICL					H Water/NaISO4 (circle)														
Presumptive Certainty Data Package (Laboratory to use applicable DEP CAM methods)															Required Reporting Limits and Data Quality Objectives														
If Presumptive Certainty Data Package is needed, initial all sections:															☐ RC-S1 ☐ S1 ☐ GW1														
☐ The required minimum field QC samples, as designated in BWSC CAM-VII have been or will be collected, as appropriate, to meet the requirements of Presumptive Certainty.															☐ RC-S2 ☐ S2 ☐ GW2														
☐ Matrix Spike (MS) samples for MCP Metals and/or Cyanide are included and identified herein.															☐ RC-GW1 ☐ S3 ☐ GW3														
☐ This Chain of Custody Record (specify) includes ☐ does not include samples defined as Drinking Water Samples.															☐ RC-GW2														
If this Chain of Custody Record identifies samples defined as Drinking Water Samples, Trip Blanks and Field Duplicates are included and identified and analysis of TICs are required, as appropriate. Laboratory should (specify if applicable) analyze															L35C														



Massachusetts Department
of Environmental Protection
Bureau of Waste Site Cleanup

WSC-CAM

Exhibit VII A

July 1, 2010

Revision No. 1

Final

Page 13 of 38

Exhibit VII A-2: MassDEP Analytical Protocol Certification Form

MassDEP Analytical Protocol Certification Form

Laboratory Name: Accutest Laboratories of New England

Project #: M96199

Project Location: Former Energy International Parcel, MA

MADEP RTN

None

This form provides certifications for the following data set: list Laboratory Sample ID Numbers(s)
M96199-1,M96199-1A,M96199-2,M96199-2A,M96199-3,M96199-3A,M96199-4,M96199-5
M96199-5A,M96199-5AD,M96199-5AS,M96199-5D,M96199-5S,M96199-6

Test method: Refer to case narrative

Matrices: Groundwater/Surface Water () Soil/Sediment (X) Drinking Water () Air () Other ()

CAM Protocol (check all that apply below):

8260 VOC (X) CAM IIA	7470/7471 Hg (X) CAM III B	MassDEP VPH (X) CAM IV A	8081 Pesticides () CAM V B	7196 Hex Cr () CAM VI B	Mass DEP APH () CAM IX A
8270 SVOC (X) CAM II B	7010 Metals () CAM III C	MassDEP EPH (X) CAM IV B	8151 Herbicides () CAM V C	8330 Explosives () CAM VIII A	TO-15 VOC () CAM IX B
6010 Metals (X) CAM III A	6020 Metals () CAM III D	8082 PCB () CAM V A	9014 Total Cyanide/PAC CAM VI A	6860 Perchlorate () CAM VIII B	

Affirmative Responses to Questions A Through F are required for "Presumptive Certainty status

A	Were all samples received in a condition consistent with those described on the Chain-of Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/> No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/> No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/> No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/> No
E	VPH, EPH, APH, and TO-15 only: a. VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	Yes Yes	<input type="checkbox"/> <input type="checkbox"/> No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/> No

Responses to questions G, H, and I below is required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/> No ¹
Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data useability and representativeness requirements described in 310 CMR 40.1056(2)(k) and WSC-07-350.				
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/> No ¹
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/> No ¹

All Negative responses must be addressed in an attached Environmental Laboratory case narrative.

I the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Signature:

Position:

Laboratory Director

Printed Name:

Reza Tand

Date:

12/22/2010

MADEP EPH FORM

Matrix	Aqueous <input type="checkbox"/>	Soil <input checked="" type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>	
Aqueous Preservative	N/A <input checked="" type="checkbox"/>	pH <= 2 <input type="checkbox"/>	pH > 2 <input type="checkbox"/>	
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg. C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Rec'd at 1.3 degC.
Extraction Method	SW846 3550B			
Method for Ranges:	MADEP EPH REV 1.1		Client ID: HA112_0-4'	Lab ID: M96199-1
Method for Targets:	MADEP EPH REV 1.1		Date Collected: 11/29/2010	Date Received: 11/29/2010
EPH Surrogate Stds.	Aliphatic: 1-Chlorooctadecane		Date Extracted: 12/2/2010	First Date Run: 12/4/2010
	Aromatic: o-Terphenyl			Last Date Run: N/A
EPH Fractionation	2-Fluorobiphenyl		% Solids: 91.9	Low Dilution: 1
Surrogate Standards.	2-Bromonaphthalene			High Dilution: N/A
Unadjusted Ranges	CAS #	Units	Result	RDL
C11-C22 Aromatics (Unadj.)		ug/kg	495000 ^A	19000

Adjusted Ranges				
C9-C18 Aliphatics	ug/kg	12100 ^A	9700	
C19-C36 Aliphatics	ug/kg	58200 ^A	9700	
C11-C22 Aromatics	ug/kg	325000 ^C	19000	
Surrogate Recoveries			Acceptance Range	
1-Chlorooctadecane	%	61	40-140 %	
o-Terphenyl	%	181 ^E	40-140 %	
2-Fluorobiphenyl	%	89	40-140 %	
2-Bromonaphthalene	%	87	40-140 %	
Footnotes				
A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range				
C Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes				
E Outside control limits due to possible matrix interference.				
Z A 'J' qualifier indicates an estimated value				

Were all QA/QC procedures REQUIRED by the EPH Method followed? ☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved? ☐ Yes ☒ No- Details Attached

Were any significant modifications made to the EPH method, as specified in Sect. 11.3? ☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature 

Postition Laboratory Director

Printed Name Reza Tand

Date 12/22/2010

MADEP EPH FORM

Matrix	Aqueous <input type="checkbox"/>	Soil <input checked="" type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>	
Aqueous Preservative	N/A <input checked="" type="checkbox"/>	pH <= 2 <input type="checkbox"/>	pH > 2 <input type="checkbox"/>	
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg. C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Rec'd at 1.3 degC.
Extraction Method	SW846 3550B			
Method for Ranges:	MADEP EPH REV 1.1		Client ID: HA112_4-8'	Lab ID: M96199-2
Method for Targets:	MADEP EPH REV 1.1		Date Collected: 11/29/2010	Date Received: 11/29/2010
EPH Surrogate Stds.	Aliphatic: 1-Chlorooctadecane		Date Extracted: 12/2/2010	First Date Run: 12/8/2010
	Aromatic: o-Terphenyl			Last Date Run: N/A
EPH Fractionation	2-Fluorobiphenyl		% Solids: 82.7	Low Dilution: 1
Surrogate Standards.	2-Bromonaphthalene			High Dilution: N/A
Unadjusted Ranges	CAS #	Units	Result	RDL
C11-C22 Aromatics (Unadj.)		ug/kg	94700 ^A	21000

Adjusted Ranges				
C9-C18 Aliphatics	ug/kg	31100 ^A	10000	
C19-C36 Aliphatics	ug/kg	77700 ^A	10000	
C11-C22 Aromatics	ug/kg	74100 ^C	21000	
Surrogate Recoveries		Acceptance Range		
1-Chlorooctadecane	%	17 ^F	40-140 %	
o-Terphenyl	%	78	40-140 %	
2-Fluorobiphenyl	%	91	40-140 %	
2-Bromonaphthalene	%	92	40-140 %	
Footnotes				
A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range				
C Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes				
F Outside control limits due to possible matrix interference. Confirmed by refractation.				
Z A 'J' qualifier indicates an estimated value				

Were all QA/QC procedures REQUIRED by the EPH Method followed? ☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved? ☐ Yes ☒ No- Details Attached

Were any significant modifications made to the EPH method, as specified in Sect. 11.3? ☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature

Reza Tand

Postition

Laboratory Director

Printed Name

Reza Tand

Date

12/22/2010

MADEP EPH FORM

Matrix	Aqueous <input type="checkbox"/>	Soil <input checked="" type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>	
Aqueous Preservative	N/A <input checked="" type="checkbox"/>	pH <= 2 <input type="checkbox"/>	pH > 2 <input type="checkbox"/>	
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg. C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Rec'd at 1.3 degC.
Extraction Method	SW846 3550B			
Method for Ranges:	MADEP EPH REV 1.1		Client ID: HA113_0-4'	Lab ID: M96199-3
Method for Targets:	MADEP EPH REV 1.1		Date Collected: 11/29/2010	Date Received: 11/29/2010
EPH Surrogate Stds.	Aliphatic: 1-Chlorooctadecane		Date Extracted: 12/2/2010	First Date Run: 12/8/2010
	Aromatic: o-Terphenyl			Last Date Run: N/A
EPH Fractionation	2-Fluorobiphenyl		% Solids: 83.5	Low Dilution: 1
Surrogate Standards.	2-Bromonaphthalene			High Dilution: N/A
Unadjusted Ranges	CAS #	Units	Result	RDL
C11-C22 Aromatics (Unadj.)		ug/kg	168000 ^A	21000

Adjusted Ranges				
C9-C18 Aliphatics	ug/kg	102000 ^A	10000	
C19-C36 Aliphatics	ug/kg	281000 ^A	10000	
C11-C22 Aromatics	ug/kg	157000 ^C	21000	
Surrogate Recoveries			Acceptance Range	
1-Chlorooctadecane	%	26 ^F	40-140 %	
o-Terphenyl	%	63	40-140 %	
2-Fluorobiphenyl	%	97	40-140 %	
2-Bromonaphthalene	%	80	40-140 %	
Footnotes				
A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range				
C Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes				
F Outside control limits due to possible matrix interference. Confirmed by refractation.				
Z A 'J' qualifier indicates an estimated value				

Were all QA/QC procedures REQUIRED by the EPH Method followed? ☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved? ☐ Yes ☒ No- Details Attached

Were any significant modifications made to the EPH method, as specified in Sect. 11.3? ☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature 

Postition Laboratory Director

Printed Name Reza Tand

Date 12/22/2010

MADEP EPH FORM

Matrix	Aqueous <input type="checkbox"/>	Soil <input checked="" type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>	
Aqueous Preservative	N/A <input checked="" type="checkbox"/>	pH <= 2 <input type="checkbox"/>	pH > 2 <input type="checkbox"/>	
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg. C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Rec'd at 1.3 degC.
Extraction Method	SW846 3550B			
Method for Ranges:	MADEP EPH REV 1.1		Client ID: HA113_12-15.5'	Lab ID: M96199-4
Method for Targets:	MADEP EPH REV 1.1		Date Collected: 11/29/2010	Date Received: 11/29/2010
EPH Surrogate Stds.	Aliphatic: 1-Chlorooctadecane		Date Extracted: 12/2/2010	First Date Run: 12/4/2010
	Aromatic: o-Terphenyl			Last Date Run: N/A
EPH Fractionation	2-Fluorobiphenyl		% Solids: 79.5	Low Dilution: 1
Surrogate Standards.	2-Bromonaphthalene			High Dilution: N/A
Unadjusted Ranges	CAS #	Units	Result	RDL
C11-C22 Aromatics (Unadj.)		ug/kg	139000 ^A	22000

Adjusted Ranges				
C9-C18 Aliphatics	ug/kg	23200 ^A	11000	
C19-C36 Aliphatics	ug/kg	63100 ^A	11000	
C11-C22 Aromatics	ug/kg	122000 ^C	22000	
Surrogate Recoveries			Acceptance Range	
1-Chlorooctadecane	%	61	40-140 %	
o-Terphenyl	%	103	40-140 %	
2-Fluorobiphenyl	%	87	40-140 %	
2-Bromonaphthalene	%	82	40-140 %	
Footnotes				
A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range				
C Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes				
Z A 'J' qualifier indicates an estimated value				

Were all QA/QC procedures REQUIRED by the EPH Method followed? ☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved? ☒ Yes ☐ No- Details Attached

Were any significant modifications made to the EPH method, as specified in Sect. 11.3? ☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature 

Postition Laboratory Director

Printed Name Reza Tand

Date 12/22/2010

MADEP EPH FORM

Matrix	Aqueous <input type="checkbox"/>	Soil <input checked="" type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>	
Aqueous Preservative	N/A <input checked="" type="checkbox"/>	pH <= 2 <input type="checkbox"/>	pH > 2 <input type="checkbox"/>	
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg. C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Rec'd at 1.3 degC.
Extraction Method	SW846 3550B			
Method for Ranges:	MADEP EPH REV 1.1		Client ID: HA111_0-4'	Lab ID: M96199-5
Method for Targets:	MADEP EPH REV 1.1		Date Collected: 11/29/2010	Date Received: 11/29/2010
EPH Surrogate Stds.	Aliphatic: 1-Chlorooctadecane		Date Extracted: 12/2/2010	First Date Run: 12/4/2010
	Aromatic: o-Terphenyl			Last Date Run: N/A
EPH Fractionation	2-Fluorobiphenyl		% Solids: 89.1	Low Dilution: 1
Surrogate Standards.	2-Bromonaphthalene			High Dilution: N/A
Unadjusted Ranges	CAS #	Units	Result	RDL
C11-C22 Aromatics (Unadj.)		ug/kg	67400 ^A	19000

Adjusted Ranges				
C9-C18 Aliphatics	ug/kg	ND ^A	9400	
C19-C36 Aliphatics	ug/kg	12000 ^A	9400	
C11-C22 Aromatics	ug/kg	46900 ^C	19000	
Surrogate Recoveries			Acceptance Range	
1-Chlorooctadecane	%	74	40-140 %	
o-Terphenyl	%	121	40-140 %	
2-Fluorobiphenyl	%	93	40-140 %	
2-Bromonaphthalene	%	87	40-140 %	
Footnotes				
A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range				
C Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes				
Z A 'J' qualifier indicates an estimated value				

Were all QA/QC procedures REQUIRED by the EPH Method followed? ☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved? ☒ Yes ☐ No- Details Attached

Were any significant modifications made to the EPH method, as specified in Sect. 11.3? ☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature

Reza Tand

Postition

Laboratory Director

Printed Name

Reza Tand

Date

12/22/2010

MADEP EPH FORM

Matrix	Aqueous <input type="checkbox"/>	Soil <input checked="" type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>	
Aqueous Preservative	N/A <input checked="" type="checkbox"/>	pH <= 2 <input type="checkbox"/>	pH > 2 <input type="checkbox"/>	
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg. C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Rec'd at 1.3 degC.
Extraction Method	SW846 3550B			
Method for Ranges:	MADEP EPH REV 1.1		Client ID: HA111_8-12'	Lab ID: M96199-6
Method for Targets:	MADEP EPH REV 1.1		Date Collected: 11/29/2010	Date Received: 11/29/2010
EPH Surrogate Stds.	Aliphatic: 1-Chlorooctadecane		Date Extracted: 12/2/2010	First Date Run: 12/4/2010
	Aromatic: o-Terphenyl			Last Date Run: N/A
EPH Fractionation	2-Fluorobiphenyl		% Solids: 67.3	Low Dilution: 1
Surrogate Standards.	2-Bromonaphthalene			High Dilution: N/A
Unadjusted Ranges	CAS #	Units	Result	RDL
C11-C22 Aromatics (Unadj.)		ug/kg	193000 ^A	27000

Adjusted Ranges				
C9-C18 Aliphatics	ug/kg	54500 ^A	13000	
C19-C36 Aliphatics	ug/kg	143000 ^A	13000	
C11-C22 Aromatics	ug/kg	161000 ^C	27000	
Surrogate Recoveries			Acceptance Range	
1-Chlorooctadecane	%	64	40-140 %	
o-Terphenyl	%	118	40-140 %	
2-Fluorobiphenyl	%	88	40-140 %	
2-Bromonaphthalene	%	85	40-140 %	
Footnotes				
A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range				
C Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes				
Z A 'J' qualifier indicates an estimated value				

Were all QA/QC procedures REQUIRED by the EPH Method followed? ☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved? ☒ Yes ☐ No- Details Attached

Were any significant modifications made to the EPH method, as specified in Sect. 11.3? ☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature

Reza Tand

Postition

Laboratory Director

Printed Name

Reza Tand

Date

12/22/2010

MADEP VPH FORM

Matrix	Aqueous <input type="checkbox"/>	Soil <input checked="" type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>	
Aqueous Preservatives	N/A <input checked="" type="checkbox"/>	pH <= 2 <input type="checkbox"/>	pH > 2 <input type="checkbox"/>	
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg. C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Rec'd at 1.3 degC.
Methanol	Methanol Covering Soil. (mL Methanol/g soil: 1:1 +/- 25%)			
Method for Ranges:	MADEP VPH REV 1.1		Client ID: HA112_0-4	Lab ID: M96199-1
Method for Target Analytes:	MADEP VPH REV 1.1		Date Collected: 11/29/2010	Date Received: 11/29/2010
VPH Surrogate Standards			Date Extracted:	First Date Run:
PID: 2,5-Dibromotoluene			N/A	12/6/2010
FID: 2,5-Dibromotoluene			% Solids:	Low Dilution:
			91.9	1
				Last Date Run:
				N/A
				High Dilution:
				N/A

Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)		N/A	ug/kg	ND ^A	5800	
C9- C10 Aromatics (Unadj.)		N/A	ug/kg	ND ^A	5800	
C9- C12 Aliphatics (Unadj.)		N/A	ug/kg	ND ^A	5800	

Adjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics		N/A	ug/kg	ND ^B	5800	
C9- C12 Aliphatics		N/A	ug/kg	ND ^D	5800	

Surrogate Recoveries	Acceptance Range
FID:2,5-Dibromotoluene	108 70-130 %
PID:2,5-Dibromotoluene	101 70-130 %

Footnotes

A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range

B Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range.

D Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C9-C12 aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C9-C10 Aromatic Hydrocarbons.

Z A "J" qualifier indicates an estimated value

Were all QA/QC procedures REQUIRED by the VPH Method followed?

☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved?

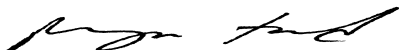
☒ Yes ☐ No- Details Attached

Were any significant modifications made to the VPH method, as specified in Sect. 11.3?

☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature



Postition

Laboratory Director

Printed Name

Reza Tand

Date

12/22/2010

MADEP VPH FORM

Matrix	Aqueous <input type="checkbox"/>	Soil <input checked="" type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>	
Aqueous Preservatives	N/A <input checked="" type="checkbox"/>	pH <= 2 <input type="checkbox"/>	pH > 2 <input type="checkbox"/>	
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg. C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Rec'd at 1.3 degC.
Methanol	Methanol Covering Soil. (mL Methanol/g soil: 1:1 +/- 25%)			
Method for Ranges:	MADEP VPH REV 1.1		Client ID: HA112_4-8	Lab ID: M96199-2
Method for Target Analytes:	MADEP VPH REV 1.1		Date Collected: 11/29/2010	Date Received: 11/29/2010
VPH Surrogate Standards			Date Extracted:	First Date Run:
PID: 2,5-Dibromotoluene			N/A	12/6/2010
FID: 2,5-Dibromotoluene			% Solids:	Low Dilution:
			82.7	1
				Last Date Run:
				N/A
				High Dilution:
				N/A

Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)		N/A	ug/kg	10300 ^A	8000	
C9- C10 Aromatics (Unadj.)		N/A	ug/kg	ND ^A	8000	
C9- C12 Aliphatics (Unadj.)		N/A	ug/kg	ND ^A	8000	

Adjusted Ranges	Units	Result	RDL
C5- C8 Aliphatics	ug/kg	10300 ^B	8000
C9- C12 Aliphatics	ug/kg	ND ^D	8000

Surrogate Recoveries	%	Acceptance Range
FID:2,5-Dibromotoluene	100	70-130 %
PID:2,5-Dibromotoluene	93	70-130 %

Footnotes

A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range

B Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range.

D Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C9-C12 aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C9-C10 Aromatic Hydrocarbons.

Z A "J" qualifier indicates an estimated value

Were all QA/QC procedures REQUIRED by the VPH Method followed?

☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved?

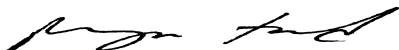
☒ Yes ☐ No- Details Attached

Were any significant modifications made to the VPH method, as specified in Sect. 11.3?

☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature



Postition

Laboratory Director

Printed Name

Reza Tand

Date

12/22/2010

MADEP VPH FORM

Matrix	Aqueous <input type="checkbox"/>	Soil <input checked="" type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>	
Aqueous Preservatives	N/A <input checked="" type="checkbox"/>	pH <= 2 <input type="checkbox"/>	pH > 2 <input type="checkbox"/>	
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg. C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Rec'd at 1.3 degC.
Methanol	Methanol Covering Soil. (mL Methanol/g soil: 1:1 +/- 25%)			
Method for Ranges:	MADEP VPH REV 1.1		Client ID: HA113_0-4	Lab ID: M96199-3
Method for Target Analytes:	MADEP VPH REV 1.1		Date Collected: 11/29/2010	Date Received: 11/29/2010
VPH Surrogate Standards			Date Extracted:	First Date Run:
PID: 2,5-Dibromotoluene			N/A	12/6/2010
FID: 2,5-Dibromotoluene			% Solids:	Low Dilution:
			83.5	1
				Last Date Run:
				N/A
				High Dilution:
				N/A

Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)		N/A	ug/kg	ND ^A	7600	
C9- C10 Aromatics (Unadj.)		N/A	ug/kg	ND ^A	7600	
C9- C12 Aliphatics (Unadj.)		N/A	ug/kg	ND ^A	7600	

Adjusted Ranges	Units	Result	RDL
C5- C8 Aliphatics	ug/kg	ND ^B	7600
C9- C12 Aliphatics	ug/kg	ND ^D	7600

Surrogate Recoveries	%	Acceptance Range
FID:2,5-Dibromotoluene	103	70-130 %
PID:2,5-Dibromotoluene	96	70-130 %

Footnotes

A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range

B Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range.

D Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C9-C12 aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C9-C10 Aromatic Hydrocarbons.

Z A "J" qualifier indicates an estimated value

Were all QA/QC procedures REQUIRED by the VPH Method followed?

☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved?

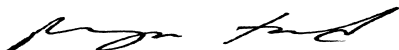
☒ Yes ☐ No- Details Attached

Were any significant modifications made to the VPH method, as specified in Sect. 11.3?

☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature



Postition

Laboratory Director

Printed Name

Reza Tand

Date

12/22/2010

MADEP VPH FORM

Matrix	Aqueous <input type="checkbox"/>	Soil <input checked="" type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>		
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>			
Aqueous Preservatives	N/A <input checked="" type="checkbox"/>	pH <= 2 <input type="checkbox"/>	pH > 2 <input type="checkbox"/>			
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg. C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Rec'd at 1.3 degC.		
Methanol	Methanol Covering Soil. (mL Methanol/g soil: 1:1 +/- 25%)					
Method for Ranges:	MADEP VPH REV 1.1		Client ID: HA113_12-15.5'	Lab ID: M96199-4		
Method for Target Analytes:	MADEP VPH REV 1.1		Date Collected: 11/29/2010	Date Received: 11/29/2010		
VPH Surrogate Standards			Date Extracted:	First Date Run:		
PID: 2,5-Dibromotoluene			N/A	12/6/2010		
FID: 2,5-Dibromotoluene			% Solids:	Low Dilution:		
			79.5	1		
				High Dilution:		
				N/A		
Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)		N/A	ug/kg	ND ^A	9500	
C9- C10 Aromatics (Unadj.)		N/A	ug/kg	ND ^A	9500	
C9- C12 Aliphatics (Unadj.)		N/A	ug/kg	ND ^A	9500	
Adjusted Ranges						
C5- C8 Aliphatics		N/A	ug/kg	ND ^B	9500	
C9- C12 Aliphatics		N/A	ug/kg	ND ^D	9500	
Surrogate Recoveries					Acceptance Range	
FID:2,5-Dibromotoluene			%	114	70-130 %	
PID:2,5-Dibromotoluene			%	107	70-130 %	
Footnotes						
A	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range					
B	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range.					
D	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C9-C12 aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C9-C10 Aromatic Hydrocarbons.					
Z	A 'J' qualifier indicates an estimated value					

Were all QA/QC procedures REQUIRED by the VPH Method followed?

☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved?

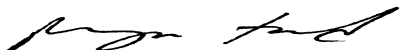
☒ Yes ☐ No- Details Attached

Were any significant modifications made to the VPH method, as specified in Sect. 11.3?

☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature



Postition

Laboratory Director

Printed Name

Reza Tand

Date

12/22/2010

MADEP VPH FORM

Matrix	Aqueous <input type="checkbox"/>	Soil <input checked="" type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>		
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>			
Aqueous Preservatives	N/A <input checked="" type="checkbox"/>	pH <= 2 <input type="checkbox"/>	pH > 2 <input type="checkbox"/>			
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg. C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Rec'd at 1.3 degC.		
Methanol	Methanol Covering Soil. (mL Methanol/g soil: 1:1 +/- 25%)					
Method for Ranges:	MADEP VPH REV 1.1		Client ID: HA111_0-4	Lab ID: M96199-5		
Method for Target Analytes:	MADEP VPH REV 1.1		Date Collected: 11/29/2010	Date Received: 11/29/2010		
VPH Surrogate Standards			Date Extracted:	First Date Run:		
PID: 2,5-Dibromotoluene			N/A	12/6/2010		
FID: 2,5-Dibromotoluene			% Solids:	Low Dilution:		
			89.1	1		
				High Dilution:		
				N/A		
Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)		N/A	ug/kg	ND ^A	6000	
C9- C10 Aromatics (Unadj.)		N/A	ug/kg	ND ^A	6000	
C9- C12 Aliphatics (Unadj.)		N/A	ug/kg	ND ^A	6000	
Adjusted Ranges						
C5- C8 Aliphatics		N/A	ug/kg	ND ^B	6000	
C9- C12 Aliphatics		N/A	ug/kg	ND ^D	6000	
Surrogate Recoveries					Acceptance Range	
FID:2,5-Dibromotoluene			%	95	70-130 %	
PID:2,5-Dibromotoluene			%	88	70-130 %	
Footnotes						
A	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range					
B	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range.					
D	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C9-C12 aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C9-C10 Aromatic Hydrocarbons.					
Z	A "J" qualifier indicates an estimated value					

Were all QA/QC procedures REQUIRED by the VPH Method followed?

☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved?

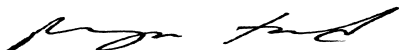
☒ Yes ☐ No- Details Attached

Were any significant modifications made to the VPH method, as specified in Sect. 11.3?

☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature



Postition

Laboratory Director

Printed Name

Reza Tand

Date

12/22/2010

MADEP VPH FORM

Matrix	Aqueous <input type="checkbox"/>	Soil <input checked="" type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>	
Aqueous Preservatives	N/A <input checked="" type="checkbox"/>	pH <= 2 <input type="checkbox"/>	pH > 2 <input type="checkbox"/>	
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg. C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Rec'd at 1.3 degC.
Methanol	Methanol Covering Soil. (mL Methanol/g soil: 1:1 +/- 25%)			
Method for Ranges:	MADEP VPH REV 1.1		Client ID: HA111_8-12'	Lab ID: M96199-6
Method for Target Analytes:	MADEP VPH REV 1.1		Date Collected: 11/29/2010	Date Received: 11/29/2010
VPH Surrogate Standards			Date Extracted:	First Date Run:
PID: 2,5-Dibromotoluene			N/A	12/6/2010
FID: 2,5-Dibromotoluene			% Solids:	Low Dilution:
			67.3	1
				Last Date Run:
				N/A
				High Dilution:
				N/A

Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)		N/A	ug/kg	ND ^A	10000	
C9- C10 Aromatics (Unadj.)		N/A	ug/kg	ND ^A	10000	
C9- C12 Aliphatics (Unadj.)		N/A	ug/kg	ND ^A	10000	

Adjusted Ranges	Units	Result	RDL
C5- C8 Aliphatics	ug/kg	ND ^B	10000
C9- C12 Aliphatics	ug/kg	ND ^D	10000

Surrogate Recoveries	%	Acceptance Range
FID:2,5-Dibromotoluene	106	70-130 %
PID:2,5-Dibromotoluene	97	70-130 %

Footnotes

A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range

B Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range.

D Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C9-C12 aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C9-C10 Aromatic Hydrocarbons.

Z A 'J' qualifier indicates an estimated value

Were all QA/QC procedures REQUIRED by the VPH Method followed?

☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved?

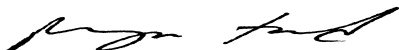
☒ Yes ☐ No- Details Attached

Were any significant modifications made to the VPH method, as specified in Sect. 11.3?

☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature



Postition

Laboratory Director

Printed Name

Reza Tand

Date

12/22/2010

Internal Sample Tracking Chronicle

Haley & Aldrich

Job No: M96199

Former Energy International Parcel, MA
Project No: 06318-502

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M96199-1 Collected: 29-NOV-10 08:25 By: MG Received: 29-NOV-10 By: JB HA112_0-4'						
M96199-1	SW846 9045	30-NOV-10	MA			PH
M96199-1	SW846 CHAP7	30-NOV-10	MA			CORR
M96199-1	SM21 2540 B MOD.	01-DEC-10	HS			% SOL
M96199-1	SW846 1020	02-DEC-10	BF			IGN
M96199-1	SW846 8260B	02-DEC-10 22:51	GK			V8260MCP
M96199-1	ASTM D1498-76M	03-DEC-10	MC			EH
M96199-1	SW846 7471A	03-DEC-10 15:26	PY	03-DEC-10	EM	HG
M96199-1	MADEP EPH REV 1.1	04-DEC-10 12:10	KD	02-DEC-10	MS	BMAEPHR
M96199-1	SW846 CHAP7	06-DEC-10	BF	06-DEC-10	BF	CREAC,SREAC
M96199-1	SW846 CHAP7	06-DEC-10	BF	06-DEC-10	BF	CREAC,SREAC
M96199-1	SW846 6010C	06-DEC-10 13:51	DA	01-DEC-10	EM	AG,AS,BA,BE,CD,CR,NI,PB,SB, SE,TL,V,ZN
M96199-1	MADEP VPH REV 1.1	06-DEC-10 16:23	AP			VMAVPHR
M96199-1	SW846 8270C	06-DEC-10 22:55	PR	03-DEC-10	FC	AB8270MCP
M96199-1	SW846 8270C	07-DEC-10 13:49	PR	03-DEC-10	FC	AB8270MCP
M96199-2 Collected: 29-NOV-10 09:00 By: MG Received: 29-NOV-10 By: JB HA112_4-8'						
M96199-2	SW846 9045	30-NOV-10	MA			PH
M96199-2	SW846 CHAP7	30-NOV-10	MA			CORR
M96199-2	SM21 2540 B MOD.	01-DEC-10	HS			% SOL
M96199-2	SW846 1020	02-DEC-10	BF			IGN
M96199-2	SW846 8260B	02-DEC-10 23:18	GK			V8260MCP
M96199-2	ASTM D1498-76M	03-DEC-10	MC			EH
M96199-2	SW846 7471A	03-DEC-10 15:28	PY	03-DEC-10	EM	HG
M96199-2	SW846 CHAP7	06-DEC-10	BF	06-DEC-10	BF	CREAC,SREAC
M96199-2	SW846 CHAP7	06-DEC-10	BF	06-DEC-10	BF	CREAC,SREAC
M96199-2	SW846 6010C	06-DEC-10 13:56	DA	01-DEC-10	EM	AG,AS,BA,BE,CD,CR,NI,PB,SB, SE,TL,V,ZN
M96199-2	MADEP VPH REV 1.1	06-DEC-10 17:03	AP			VMAVPHR
M96199-2	SW846 8270C	06-DEC-10 23:24	PR	03-DEC-10	FC	AB8270MCP
M96199-2	MADEP EPH REV 1.1	08-DEC-10 18:45	AL	02-DEC-10	MS	BMAEPHR
M96199-3 Collected: 29-NOV-10 11:25 By: MG Received: 29-NOV-10 By: JB HA113_0-4'						

Internal Sample Tracking Chronicle

Haley & Aldrich

Job No: M96199

Former Energy International Parcel, MA
Project No: 06318-502

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M96199-3	SW846 9045	30-NOV-10	MA			PH
M96199-3	SW846 CHAP7	30-NOV-10	MA			CORR
M96199-3	SM21 2540 B MOD.	01-DEC-10	HS			%SOL
M96199-3	SW846 1020	02-DEC-10	BF			IGN
M96199-3	SW846 8260B	02-DEC-10 23:45	GK			V8260MCP
M96199-3	ASTM D1498-76M	03-DEC-10	MC			EH
M96199-3	SW846 7471A	03-DEC-10 15:31	PY	03-DEC-10	EM	HG
M96199-3	SW846 CHAP7	06-DEC-10	BF	06-DEC-10	BF	CREAC,SREAC
M96199-3	SW846 CHAP7	06-DEC-10	BF	06-DEC-10	BF	CREAC,SREAC
M96199-3	SW846 6010C	06-DEC-10 14:00	DA	01-DEC-10	EM	AG,AS,BA,BE,CD,CR,NI,PB,SB,SE,TL,V,ZN
M96199-3	MADEP VPH REV 1.1	06-DEC-10 17:42	AP			VMAVPHR
M96199-3	SW846 8270C	06-DEC-10 23:53	PR	03-DEC-10	FC	AB8270MCP
M96199-3	MADEP EPH REV 1.1	08-DEC-10 19:21	AL	02-DEC-10	MS	BMAEPHR
M96199-4 Collected: 29-NOV-10 12:50 By: MG Received: 29-NOV-10 By: JB HA113_12-15.5'						
M96199-4	SW846 9045	30-NOV-10	MA			PH
M96199-4	SW846 CHAP7	30-NOV-10	MA			CORR
M96199-4	SM21 2540 B MOD.	01-DEC-10	HS			%SOL
M96199-4	SW846 1020	02-DEC-10	BF			IGN
M96199-4	ASTM D1498-76M	03-DEC-10	MC			EH
M96199-4	SW846 7471A	03-DEC-10 15:37	PY	03-DEC-10	EM	HG
M96199-4	MADEP EPH REV 1.1	04-DEC-10 13:59	KD	02-DEC-10	MS	BMAEPHR
M96199-4	SW846 CHAP7	06-DEC-10	BF	06-DEC-10	BF	CREAC,SREAC
M96199-4	SW846 CHAP7	06-DEC-10	BF	06-DEC-10	BF	CREAC,SREAC
M96199-4	SW846 6010C	06-DEC-10 14:04	DA	01-DEC-10	EM	AG,AS,BE,CD,CR,NI,PB,SB,SE,TL,V,ZN
M96199-4	MADEP VPH REV 1.1	06-DEC-10 18:22	AP			VMAVPHR
M96199-4	SW846 8270C	07-DEC-10 00:22	PR	03-DEC-10	FC	AB8270MCP
M96199-4	SW846 6010C	07-DEC-10 14:39	DA	01-DEC-10	EM	BA
M96199-4	SW846 8260B	07-DEC-10 17:07	GK			V8260MCP
M96199-5 Collected: 29-NOV-10 14:00 By: MG Received: 29-NOV-10 By: JB HA111_0-4'						
M96199-5	SW846 9045	30-NOV-10	MA			PH
M96199-5	SW846 CHAP7	30-NOV-10	MA			CORR
M96199-5	SM21 2540 B MOD.	01-DEC-10	HS			%SOL

Internal Sample Tracking Chronicle

Haley & Aldrich

Job No: M96199

Former Energy International Parcel, MA
Project No: 06318-502

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M96199-5	SW846 1020	02-DEC-10	BF			IGN
M96199-5	ASTM D1498-76M	03-DEC-10	MC			EH
M96199-5	SW846 7471A	03-DEC-10 15:21	PY	03-DEC-10	EM	HG
M96199-5	MADEP EPH REV 1.1	04-DEC-10 14:35	KD	02-DEC-10	MS	BMAEPHR
M96199-5	SW846 CHAP7	06-DEC-10	BF	06-DEC-10	BF	CREAC,SREAC
M96199-5	SW846 CHAP7	06-DEC-10	BF	06-DEC-10	BF	CREAC,SREAC
M96199-5	SW846 6010C	06-DEC-10 13:18	DA	01-DEC-10	EM	AG,AS,BE,CD,CR,NI,PB,SB,SE, TL,V,ZN
M96199-5	MADEP VPH REV 1.1	06-DEC-10 19:02	AP			VMAVPHR
M96199-5	SW846 8270C	07-DEC-10 00:50	PR	03-DEC-10	FC	AB8270MCP
M96199-5	SW846 6010C	07-DEC-10 14:04	DA	01-DEC-10	EM	BA
M96199-5	SW846 8260B	07-DEC-10 17:35	GK			V8260MCP
M96199-6 Collected: 29-NOV-10 15:05 By: MG Received: 29-NOV-10 By: JB HA111_8-12'						
M96199-6	SW846 9045	30-NOV-10	MA			PH
M96199-6	SW846 CHAP7	30-NOV-10	MA			CORR
M96199-6	SM21 2540 B MOD.	01-DEC-10	HS			%SOL
M96199-6	SW846 1020	02-DEC-10	BF			IGN
M96199-6	SW846 8260B	02-DEC-10 22:24	GK			V8260MCP
M96199-6	ASTM D1498-76M	03-DEC-10	MC			EH
M96199-6	SW846 7471A	03-DEC-10 16:21	PY	03-DEC-10	EM	HG
M96199-6	MADEP EPH REV 1.1	04-DEC-10 15:11	KD	02-DEC-10	MS	BMAEPHR
M96199-6	SW846 CHAP7	06-DEC-10	BF	06-DEC-10	BF	CREAC,SREAC
M96199-6	SW846 CHAP7	06-DEC-10	BF	06-DEC-10	BF	CREAC,SREAC
M96199-6	SW846 6010C	06-DEC-10 14:09	DA	01-DEC-10	EM	AG,AS,BA,BE,CD,CR,NI,PB,SB, SE,TL,V,ZN
M96199-6	MADEP VPH REV 1.1	06-DEC-10 19:42	AP			VMAVPHR
M96199-6	SW846 8270C	07-DEC-10 01:19	PR	03-DEC-10	FC	AB8270MCP
M96199-1A Collected: 29-NOV-10 08:25 By: MG Received: 29-NOV-10 By: JB HA112_0-4'						
M96199-1A	SW846 6010C	09-DEC-10 23:35	DA	09-DEC-10	EM	EPB
M96199-2A Collected: 29-NOV-10 09:00 By: MG Received: 29-NOV-10 By: JB HA112_4-8'						
M96199-2A	SW846 6010C	09-DEC-10 23:40	DA	09-DEC-10	EM	EPB

Internal Sample Tracking Chronicle

Haley & Aldrich

Job No: M96199

Former Energy International Parcel, MA
Project No: 06318-502

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M96199-3A Collected: 29-NOV-10 11:25 By: MG Received: 29-NOV-10 By: JB HA113_0-4'						
M96199-3A	SW846 6010C	09-DEC-10 23:44	DA	09-DEC-10	EM	EPB
M96199-5A Collected: 29-NOV-10 14:00 By: MG Received: 29-NOV-10 By: JB HA111_0-4'						
M96199-5A	SW846 6010C	09-DEC-10 22:55	DA	09-DEC-10	EM	EPB

GC/MS Volatiles

5

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Page 1 of 3

Job Number: M96199

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSR660-MB	R18522A.D	1	12/02/10	GK	n/a	n/a	MSR660

The QC reported here applies to the following samples:

Method: SW846 8260B

M96199-1, M96199-2, M96199-3, M96199-6

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	250	ug/kg	
71-43-2	Benzene	ND	25	ug/kg	
108-86-1	Bromobenzene	ND	250	ug/kg	
74-97-5	Bromochloromethane	ND	250	ug/kg	
75-27-4	Bromodichloromethane	ND	100	ug/kg	
75-25-2	Bromoform	ND	100	ug/kg	
74-83-9	Bromomethane	ND	100	ug/kg	
78-93-3	2-Butanone (MEK)	ND	250	ug/kg	
104-51-8	n-Butylbenzene	ND	250	ug/kg	
135-98-8	sec-Butylbenzene	ND	250	ug/kg	
98-06-6	tert-Butylbenzene	ND	250	ug/kg	
75-15-0	Carbon disulfide	ND	250	ug/kg	
56-23-5	Carbon tetrachloride	ND	100	ug/kg	
108-90-7	Chlorobenzene	ND	100	ug/kg	
75-00-3	Chloroethane	ND	250	ug/kg	
67-66-3	Chloroform	ND	100	ug/kg	
74-87-3	Chloromethane	ND	250	ug/kg	
95-49-8	o-Chlorotoluene	ND	250	ug/kg	
106-43-4	p-Chlorotoluene	ND	250	ug/kg	
108-20-3	Di-Isopropyl ether	ND	100	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	250	ug/kg	
124-48-1	Dibromochloromethane	ND	100	ug/kg	
106-93-4	1,2-Dibromoethane	ND	100	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	100	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	100	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	100	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	100	ug/kg	
75-34-3	1,1-Dichloroethane	ND	100	ug/kg	
107-06-2	1,2-Dichloroethane	ND	100	ug/kg	
75-35-4	1,1-Dichloroethene	ND	100	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	100	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	100	ug/kg	
78-87-5	1,2-Dichloropropane	ND	100	ug/kg	
142-28-9	1,3-Dichloropropane	ND	250	ug/kg	
594-20-7	2,2-Dichloropropane	ND	250	ug/kg	
563-58-6	1,1-Dichloropropene	ND	250	ug/kg	

Method Blank Summary

Page 2 of 3

Job Number: M96199
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSR660-MB	R18522A.D	1	12/02/10	GK	n/a	n/a	MSR660

The QC reported here applies to the following samples:

Method: SW846 8260B

M96199-1, M96199-2, M96199-3, M96199-6

CAS No.	Compound	Result	RL	Units	Q
10061-01-5	cis-1,3-Dichloropropene	ND	100	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	100	ug/kg	
123-91-1	1,4-Dioxane	ND	1300	ug/kg	
60-29-7	Ethyl Ether	ND	250	ug/kg	
100-41-4	Ethylbenzene	ND	100	ug/kg	
87-68-3	Hexachlorobutadiene	ND	250	ug/kg	
591-78-6	2-Hexanone	ND	250	ug/kg	
98-82-8	Isopropylbenzene	ND	250	ug/kg	
99-87-6	p-Isopropyltoluene	ND	250	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	100	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	250	ug/kg	
74-95-3	Methylene bromide	ND	250	ug/kg	
75-09-2	Methylene chloride	ND	100	ug/kg	
91-20-3	Naphthalene	ND	250	ug/kg	
103-65-1	n-Propylbenzene	ND	250	ug/kg	
100-42-5	Styrene	ND	250	ug/kg	
994-05-8	tert-Amyl Methyl Ether	ND	250	ug/kg	
637-92-3	tert-Butyl Ethyl Ether	ND	100	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	250	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	100	ug/kg	
127-18-4	Tetrachloroethene	ND	100	ug/kg	
109-99-9	Tetrahydrofuran	ND	500	ug/kg	
108-88-3	Toluene	ND	250	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	250	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	250	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	100	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	100	ug/kg	
79-01-6	Trichloroethene	ND	100	ug/kg	
75-69-4	Trichlorofluoromethane	ND	100	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	250	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	250	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	250	ug/kg	
75-01-4	Vinyl chloride	ND	100	ug/kg	
	m,p-Xylene	ND	100	ug/kg	
95-47-6	o-Xylene	ND	100	ug/kg	
1330-20-7	Xylene (total)	ND	100	ug/kg	

Method Blank Summary

Job Number: M96199
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSR660-MB	R18522A.D	1	12/02/10	GK	n/a	n/a	MSR660

The QC reported here applies to the following samples: Method: SW846 8260B

M96199-1, M96199-2, M96199-3, M96199-6

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	103% 70-130%
2037-26-5	Toluene-D8	106% 70-130%
460-00-4	4-Bromofluorobenzene	104% 70-130%

Method Blank Summary

Page 1 of 3

Job Number: M96199

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSR663-MB	R18611A.D	1	12/07/10	GK	n/a	n/a	MSR663

The QC reported here applies to the following samples:

Method: SW846 8260B

M96199-4, M96199-5

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	250	ug/kg	
71-43-2	Benzene	ND	25	ug/kg	
108-86-1	Bromobenzene	ND	250	ug/kg	
74-97-5	Bromochloromethane	ND	250	ug/kg	
75-27-4	Bromodichloromethane	ND	100	ug/kg	
75-25-2	Bromoform	ND	100	ug/kg	
74-83-9	Bromomethane	ND	100	ug/kg	
78-93-3	2-Butanone (MEK)	ND	250	ug/kg	
104-51-8	n-Butylbenzene	ND	250	ug/kg	
135-98-8	sec-Butylbenzene	ND	250	ug/kg	
98-06-6	tert-Butylbenzene	ND	250	ug/kg	
75-15-0	Carbon disulfide	ND	250	ug/kg	
56-23-5	Carbon tetrachloride	ND	100	ug/kg	
108-90-7	Chlorobenzene	ND	100	ug/kg	
75-00-3	Chloroethane	ND	250	ug/kg	
67-66-3	Chloroform	ND	100	ug/kg	
74-87-3	Chloromethane	ND	250	ug/kg	
95-49-8	o-Chlorotoluene	ND	250	ug/kg	
106-43-4	p-Chlorotoluene	ND	250	ug/kg	
108-20-3	Di-Isopropyl ether	ND	100	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	250	ug/kg	
124-48-1	Dibromochloromethane	ND	100	ug/kg	
106-93-4	1,2-Dibromoethane	ND	100	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	100	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	100	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	100	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	100	ug/kg	
75-34-3	1,1-Dichloroethane	ND	100	ug/kg	
107-06-2	1,2-Dichloroethane	ND	100	ug/kg	
75-35-4	1,1-Dichloroethene	ND	100	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	100	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	100	ug/kg	
78-87-5	1,2-Dichloropropane	ND	100	ug/kg	
142-28-9	1,3-Dichloropropane	ND	250	ug/kg	
594-20-7	2,2-Dichloropropane	ND	250	ug/kg	
563-58-6	1,1-Dichloropropene	ND	250	ug/kg	

Method Blank Summary

Job Number: M96199
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSR663-MB	R18611A.D	1	12/07/10	GK	n/a	n/a	MSR663

The QC reported here applies to the following samples:

Method: SW846 8260B

M96199-4, M96199-5

CAS No.	Compound	Result	RL	Units	Q
10061-01-5	cis-1,3-Dichloropropene	ND	100	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	100	ug/kg	
123-91-1	1,4-Dioxane	ND	1300	ug/kg	
60-29-7	Ethyl Ether	ND	250	ug/kg	
100-41-4	Ethylbenzene	ND	100	ug/kg	
87-68-3	Hexachlorobutadiene	ND	250	ug/kg	
591-78-6	2-Hexanone	ND	250	ug/kg	
98-82-8	Isopropylbenzene	ND	250	ug/kg	
99-87-6	p-Isopropyltoluene	ND	250	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	100	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	250	ug/kg	
74-95-3	Methylene bromide	ND	250	ug/kg	
75-09-2	Methylene chloride	ND	100	ug/kg	
91-20-3	Naphthalene	ND	250	ug/kg	
103-65-1	n-Propylbenzene	ND	250	ug/kg	
100-42-5	Styrene	ND	250	ug/kg	
994-05-8	tert-Amyl Methyl Ether	ND	250	ug/kg	
637-92-3	tert-Butyl Ethyl Ether	ND	100	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	250	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	100	ug/kg	
127-18-4	Tetrachloroethene	ND	100	ug/kg	
109-99-9	Tetrahydrofuran	ND	500	ug/kg	
108-88-3	Toluene	ND	250	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	250	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	250	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	100	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	100	ug/kg	
79-01-6	Trichloroethene	ND	100	ug/kg	
75-69-4	Trichlorofluoromethane	ND	100	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	250	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	250	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	250	ug/kg	
75-01-4	Vinyl chloride	ND	100	ug/kg	
	m,p-Xylene	ND	100	ug/kg	
95-47-6	o-Xylene	ND	100	ug/kg	
1330-20-7	Xylene (total)	ND	100	ug/kg	

Method Blank Summary

Job Number: M96199
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSR663-MB	R18611A.D	1	12/07/10	GK	n/a	n/a	MSR663

The QC reported here applies to the following samples: Method: SW846 8260B

M96199-4, M96199-5

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	114% 70-130%
2037-26-5	Toluene-D8	114% 70-130%
460-00-4	4-Bromofluorobenzene	111% 70-130%

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 3

Job Number: M96199

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSR660-BS	R18519A.D	1	12/02/10	GK	n/a	n/a	MSR660
MSR660-BSD	R18520A.D	1	12/02/10	GK	n/a	n/a	MSR660

The QC reported here applies to the following samples:

Method: SW846 8260B

M96199-1, M96199-2, M96199-3, M96199-6

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	2500	2160	86	1950	78	10	70-130/25
71-43-2	Benzene	2500	2610	104	2690	108	3	70-130/25
108-86-1	Bromobenzene	2500	2740	110	2840	114	4	70-130/25
74-97-5	Bromochloromethane	2500	2670	107	2740	110	3	70-130/25
75-27-4	Bromodichloromethane	2500	2760	110	2810	112	2	70-130/25
75-25-2	Bromoform	2500	2610	104	2700	108	3	70-130/25
74-83-9	Bromomethane	2500	2300	92	2460	98	7	70-130/25
78-93-3	2-Butanone (MEK)	2500	2290	92	2180	87	5	70-130/25
104-51-8	n-Butylbenzene	2500	2600	104	2720	109	5	70-130/25
135-98-8	sec-Butylbenzene	2500	2650	106	2770	111	4	70-130/25
98-06-6	tert-Butylbenzene	2500	2690	108	2780	111	3	70-130/25
75-15-0	Carbon disulfide	2500	2490	100	2630	105	5	70-130/25
56-23-5	Carbon tetrachloride	2500	2660	106	2750	110	3	70-130/25
108-90-7	Chlorobenzene	2500	2840	114	2980	119	5	70-130/25
75-00-3	Chloroethane	2500	2240	90	2410	96	7	70-130/25
67-66-3	Chloroform	2500	2600	104	2640	106	2	70-130/25
74-87-3	Chloromethane	2500	1960	78	2100	84	7	70-130/25
95-49-8	o-Chlorotoluene	2500	2640	106	2760	110	4	70-130/25
106-43-4	p-Chlorotoluene	2500	2700	108	2800	112	4	70-130/25
108-20-3	Di-Isopropyl ether	2500	2360	94	2420	97	3	70-130/25
96-12-8	1,2-Dibromo-3-chloropropane	2500	2370	95	2450	98	3	70-130/25
124-48-1	Dibromochloromethane	2500	3000	120	3040	122	1	70-130/25
106-93-4	1,2-Dibromoethane	2500	2770	111	2830	113	2	70-130/25
95-50-1	1,2-Dichlorobenzene	2500	2750	110	2840	114	3	70-130/25
541-73-1	1,3-Dichlorobenzene	2500	2760	110	2870	115	4	70-130/25
106-46-7	1,4-Dichlorobenzene	2500	2750	110	2850	114	4	70-130/25
75-71-8	Dichlorodifluoromethane	2500	1850	74	1990	80	7	70-130/25
75-34-3	1,1-Dichloroethane	2500	2470	99	2560	102	4	70-130/25
107-06-2	1,2-Dichloroethane	2500	2600	104	2670	107	3	70-130/25
75-35-4	1,1-Dichloroethene	2500	2500	100	2580	103	3	70-130/25
156-59-2	cis-1,2-Dichloroethene	2500	2510	100	2610	104	4	70-130/25
156-60-5	trans-1,2-Dichloroethene	2500	2550	102	2660	106	4	70-130/25
78-87-5	1,2-Dichloropropane	2500	2550	102	2630	105	3	70-130/25
142-28-9	1,3-Dichloropropane	2500	2690	108	2750	110	2	70-130/25
594-20-7	2,2-Dichloropropane	2500	2640	106	2740	110	4	70-130/25
563-58-6	1,1-Dichloropropene	2500	2560	102	2660	106	4	70-130/25

Blank Spike/Blank Spike Duplicate Summary

Page 2 of 3

Job Number: M96199

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSR660-BS	R18519A.D	1	12/02/10	GK	n/a	n/a	MSR660
MSR660-BSD	R18520A.D	1	12/02/10	GK	n/a	n/a	MSR660

The QC reported here applies to the following samples:

Method: SW846 8260B

M96199-1, M96199-2, M96199-3, M96199-6

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
10061-01-5	cis-1,3-Dichloropropene	2500	2800	112	2880	115	3	70-130/25
10061-02-6	trans-1,3-Dichloropropene	2500	3010	120	3080	123	2	70-130/25
123-91-1	1,4-Dioxane	12500	11600	93	12300	98	6	70-130/25
60-29-7	Ethyl Ether	2500	2420	97	2480	99	2	70-130/25
100-41-4	Ethylbenzene	2500	2760	110	2880	115	4	70-130/25
87-68-3	Hexachlorobutadiene	2500	2810	112	2900	116	3	70-130/25
591-78-6	2-Hexanone	2500	2100	84	1990	80	5	70-130/25
98-82-8	Isopropylbenzene	2500	3090	124	3240	130	5	70-130/25
99-87-6	p-Isopropyltoluene	2500	2710	108	2840	114	5	70-130/25
1634-04-4	Methyl Tert Butyl Ether	2500	2380	95	2440	98	2	70-130/25
108-10-1	4-Methyl-2-pentanone (MIBK)	2500	2080	83	2110	84	1	70-130/25
74-95-3	Methylene bromide	2500	2660	106	2710	108	2	70-130/25
75-09-2	Methylene chloride	2500	2560	102	2610	104	2	70-130/25
91-20-3	Naphthalene	2500	2360	94	2530	101	7	70-130/25
103-65-1	n-Propylbenzene	2500	2630	105	2770	111	5	70-130/25
100-42-5	Styrene	2500	2970	119	3110	124	5	70-130/25
994-05-8	tert-Amyl Methyl Ether	2500	2480	99	2560	102	3	70-130/25
637-92-3	tert-Butyl Ethyl Ether	2500	2470	99	2520	101	2	70-130/25
630-20-6	1,1,1,2-Tetrachloroethane	2500	2920	117	3050	122	4	70-130/25
79-34-5	1,1,2,2-Tetrachloroethane	2500	2520	101	2600	104	3	70-130/25
127-18-4	Tetrachloroethene	2500	2820	113	3000	120	6	70-130/25
109-99-9	Tetrahydrofuran	2500	2100	84	2090	84	0	70-130/25
108-88-3	Toluene	2500	2650	106	2750	110	4	70-130/25
87-61-6	1,2,3-Trichlorobenzene	2500	2490	100	2660	106	7	70-130/25
120-82-1	1,2,4-Trichlorobenzene	2500	2710	108	2870	115	6	70-130/25
71-55-6	1,1,1-Trichloroethane	2500	2620	105	2740	110	4	70-130/25
79-00-5	1,1,2-Trichloroethane	2500	2590	104	2600	104	0	70-130/25
79-01-6	Trichloroethene	2500	2550	102	2660	106	4	70-130/25
75-69-4	Trichlorofluoromethane	2500	2370	95	2510	100	6	70-130/25
96-18-4	1,2,3-Trichloropropane	2500	2540	102	2560	102	1	70-130/25
95-63-6	1,2,4-Trimethylbenzene	2500	2710	108	2830	113	4	70-130/25
108-67-8	1,3,5-Trimethylbenzene	2500	2710	108	2810	112	4	70-130/25
75-01-4	Vinyl chloride	2500	2340	94	2560	102	9	70-130/25
	m,p-Xylene	5000	5620	112	5840	117	4	70-130/25
95-47-6	o-Xylene	2500	2830	113	2950	118	4	70-130/25
1330-20-7	Xylene (total)	7500	8460	113	8790	117	4	70-130/25

Blank Spike/Blank Spike Duplicate Summary

Job Number: M96199
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSR660-BS	R18519A.D	1	12/02/10	GK	n/a	n/a	MSR660
MSR660-BSD	R18520A.D	1	12/02/10	GK	n/a	n/a	MSR660

The QC reported here applies to the following samples:

Method: SW846 8260B

M96199-1, M96199-2, M96199-3, M96199-6

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	105%	108%	70-130%
2037-26-5	Toluene-D8	104%	109%	70-130%
460-00-4	4-Bromofluorobenzene	106%	108%	70-130%

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 3

Job Number: M96199

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSR663-BS	R18608A.D	1	12/07/10	GK	n/a	n/a	MSR663
MSR663-BSD	R18609A.D	1	12/07/10	GK	n/a	n/a	MSR663

The QC reported here applies to the following samples:

Method: SW846 8260B

M96199-4, M96199-5

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	2500	2410	96	2160	86	11	70-130/25
71-43-2	Benzene	2500	2740	110	2850	114	4	70-130/25
108-86-1	Bromobenzene	2500	2910	116	2980	119	2	70-130/25
74-97-5	Bromochloromethane	2500	2840	114	2870	115	1	70-130/25
75-27-4	Bromodichloromethane	2500	2950	118	3040	122	3	70-130/25
75-25-2	Bromoform	2500	2900	116	2880	115	1	70-130/25
74-83-9	Bromomethane	2500	2500	100	2590	104	4	70-130/25
78-93-3	2-Butanone (MEK)	2500	2550	102	2490	100	2	70-130/25
104-51-8	n-Butylbenzene	2500	2810	112	2890	116	3	70-130/25
135-98-8	sec-Butylbenzene	2500	2850	114	2950	118	3	70-130/25
98-06-6	tert-Butylbenzene	2500	2920	117	3020	121	3	70-130/25
75-15-0	Carbon disulfide	2500	2770	111	2840	114	2	70-130/25
56-23-5	Carbon tetrachloride	2500	3190	128	3280	131* a	3	70-130/25
108-90-7	Chlorobenzene	2500	3020	121	3080	123	2	70-130/25
75-00-3	Chloroethane	2500	2430	97	2560	102	5	70-130/25
67-66-3	Chloroform	2500	2770	111	2820	113	2	70-130/25
74-87-3	Chloromethane	2500	2150	86	2180	87	1	70-130/25
95-49-8	o-Chlorotoluene	2500	2760	110	2880	115	4	70-130/25
106-43-4	p-Chlorotoluene	2500	2840	114	2930	117	3	70-130/25
108-20-3	Di-Isopropyl ether	2500	2400	96	2430	97	1	70-130/25
96-12-8	1,2-Dibromo-3-chloropropane	2500	2560	102	2590	104	1	70-130/25
124-48-1	Dibromochloromethane	2500	3250	130	3290	132* a	1	70-130/25
106-93-4	1,2-Dibromoethane	2500	2950	118	2960	118	0	70-130/25
95-50-1	1,2-Dichlorobenzene	2500	2920	117	2960	118	1	70-130/25
541-73-1	1,3-Dichlorobenzene	2500	2910	116	2970	119	2	70-130/25
106-46-7	1,4-Dichlorobenzene	2500	2900	116	2960	118	2	70-130/25
75-71-8	Dichlorodifluoromethane	2500	2700	108	2730	109	1	70-130/25
75-34-3	1,1-Dichloroethane	2500	2620	105	2670	107	2	70-130/25
107-06-2	1,2-Dichloroethane	2500	2860	114	2900	116	1	70-130/25
75-35-4	1,1-Dichloroethene	2500	2790	112	2860	114	2	70-130/25
156-59-2	cis-1,2-Dichloroethene	2500	2630	105	2690	108	2	70-130/25
156-60-5	trans-1,2-Dichloroethene	2500	2700	108	2800	112	4	70-130/25
78-87-5	1,2-Dichloropropane	2500	2600	104	2660	106	2	70-130/25
142-28-9	1,3-Dichloropropane	2500	2840	114	2840	114	0	70-130/25
594-20-7	2,2-Dichloropropane	2500	2950	118	3030	121	3	70-130/25
563-58-6	1,1-Dichloropropene	2500	2850	114	2960	118	4	70-130/25

Blank Spike/Blank Spike Duplicate Summary

Page 2 of 3

Job Number: M96199
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSR663-BS	R18608A.D	1	12/07/10	GK	n/a	n/a	MSR663
MSR663-BSD	R18609A.D	1	12/07/10	GK	n/a	n/a	MSR663

The QC reported here applies to the following samples:

Method: SW846 8260B

M96199-4, M96199-5

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
10061-01-5	cis-1,3-Dichloropropene	2500	2910	116	3010	120	3	70-130/25
10061-02-6	trans-1,3-Dichloropropene	2500	3200	128	3250	130	2	70-130/25
123-91-1	1,4-Dioxane	12500	11600	93	12700	102	9	70-130/25
60-29-7	Ethyl Ether	2500	2530	101	2570	103	2	70-130/25
100-41-4	Ethylbenzene	2500	2930	117	2990	120	2	70-130/25
87-68-3	Hexachlorobutadiene	2500	3290	132* a	3390	136* a	3	70-130/25
591-78-6	2-Hexanone	2500	2190	88	2070	83	6	70-130/25
98-82-8	Isopropylbenzene	2500	3290	132* a	3430	137* a	4	70-130/25
99-87-6	p-Isopropyltoluene	2500	2930	117	3010	120	3	70-130/25
1634-04-4	Methyl Tert Butyl Ether	2500	2550	102	2540	102	0	70-130/25
108-10-1	4-Methyl-2-pentanone (MIBK)	2500	2140	86	2170	87	1	70-130/25
74-95-3	Methylene bromide	2500	2900	116	2950	118	2	70-130/25
75-09-2	Methylene chloride	2500	2660	106	2760	110	4	70-130/25
91-20-3	Naphthalene	2500	2670	107	2740	110	3	70-130/25
103-65-1	n-Propylbenzene	2500	2790	112	2910	116	4	70-130/25
100-42-5	Styrene	2500	3080	123	3180	127	3	70-130/25
994-05-8	tert-Amyl Methyl Ether	2500	2640	106	2690	108	2	70-130/25
637-92-3	tert-Butyl Ethyl Ether	2500	2580	103	2590	104	0	70-130/25
630-20-6	1,1,1,2-Tetrachloroethane	2500	3190	128	3240	130	2	70-130/25
79-34-5	1,1,2,2-Tetrachloroethane	2500	2660	106	2690	108	1	70-130/25
127-18-4	Tetrachloroethene	2500	3210	128	3290	132* a	2	70-130/25
109-99-9	Tetrahydrofuran	2500	2080	83	2060	82	1	70-130/25
108-88-3	Toluene	2500	2800	112	2930	117	5	70-130/25
87-61-6	1,2,3-Trichlorobenzene	2500	2870	115	2930	117	2	70-130/25
120-82-1	1,2,4-Trichlorobenzene	2500	3000	120	3060	122	2	70-130/25
71-55-6	1,1,1-Trichloroethane	2500	3040	122	3100	124	2	70-130/25
79-00-5	1,1,2-Trichloroethane	2500	2690	108	2710	108	1	70-130/25
79-01-6	Trichloroethene	2500	2800	112	2910	116	4	70-130/25
75-69-4	Trichlorofluoromethane	2500	2980	119	3030	121	2	70-130/25
96-18-4	1,2,3-Trichloropropane	2500	2610	104	2690	108	3	70-130/25
95-63-6	1,2,4-Trimethylbenzene	2500	2890	116	2980	119	3	70-130/25
108-67-8	1,3,5-Trimethylbenzene	2500	2910	116	2980	119	2	70-130/25
75-01-4	Vinyl chloride	2500	2990	120	2920	117	2	70-130/25
	m,p-Xylene	5000	5920	118	6100	122	3	70-130/25
95-47-6	o-Xylene	2500	2960	118	3050	122	3	70-130/25
1330-20-7	Xylene (total)	7500	8880	118	9160	122	3	70-130/25

Blank Spike/Blank Spike Duplicate Summary

Page 3 of 3

Job Number: M96199

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSR663-BS	R18608A.D	1	12/07/10	GK	n/a	n/a	MSR663
MSR663-BSD	R18609A.D	1	12/07/10	GK	n/a	n/a	MSR663

The QC reported here applies to the following samples:

Method: SW846 8260B

M96199-4, M96199-5

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	114%	117%	70-130%
2037-26-5	Toluene-D8	113%	117%	70-130%
460-00-4	4-Bromofluorobenzene	111%	115%	70-130%

(a) Outside control limits. Blank Spike meets program technical requirements.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: M96199
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M96199-5MS	R18621.D	1	12/07/10	GK	n/a	n/a	MSR663
M96199-5MSD	R18622.D	1	12/07/10	GK	n/a	n/a	MSR663
M96199-5	R18620.D	1	12/07/10	GK	n/a	n/a	MSR663

The QC reported here applies to the following samples:

Method: SW846 8260B

M96199-4, M96199-5

CAS No.	Compound	M96199-5 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		2760	2090	76	1650	60* a	24	70-130/30
71-43-2	Benzene	20.4		2760	3010	108	3150	114	5	70-130/30
108-86-1	Bromobenzene	ND		2760	3100	112	3220	117	4	70-130/30
74-97-5	Bromochloromethane	ND		2760	2990	108	3140	114	5	70-130/30
75-27-4	Bromodichloromethane	ND		2760	3180	115	3250	118	2	70-130/30
75-25-2	Bromoform	ND		2760	3080	112	3130	114	2	70-130/30
74-83-9	Bromomethane	ND		2760	2820	102	2960	107	5	70-130/30
78-93-3	2-Butanone (MEK)	ND		2760	2390	87	2020	73	17	70-130/30
104-51-8	n-Butylbenzene	ND		2760	3030	110	3170	115	5	70-130/30
135-98-8	sec-Butylbenzene	ND		2760	3080	112	3250	118	5	70-130/30
98-06-6	tert-Butylbenzene	ND		2760	3130	114	3290	119	5	70-130/30
75-15-0	Carbon disulfide	ND		2760	2980	108	3210	116	7	70-130/30
56-23-5	Carbon tetrachloride	ND		2760	3510	127	3610	131* a	3	70-130/30
108-90-7	Chlorobenzene	ND		2760	3270	119	3380	123	3	70-130/30
75-00-3	Chloroethane	ND		2760	2730	99	2930	106	7	70-130/30
67-66-3	Chloroform	ND		2760	2990	108	3100	112	4	70-130/30
74-87-3	Chloromethane	ND		2760	2310	84	2560	93	10	70-130/30
95-49-8	o-Chlorotoluene	ND		2760	2980	108	3110	113	4	70-130/30
106-43-4	p-Chlorotoluene	ND		2760	3050	111	3180	115	4	70-130/30
108-20-3	Di-Isopropyl ether	ND		2760	2580	94	2690	98	4	70-130/30
96-12-8	1,2-Dibromo-3-chloropropane	ND		2760	2780	101	2840	103	2	70-130/30
124-48-1	Dibromochloromethane	ND		2760	3480	126	3530	128	1	70-130/30
106-93-4	1,2-Dibromoethane	ND		2760	3160	115	3240	118	3	70-130/30
95-50-1	1,2-Dichlorobenzene	ND		2760	3130	114	3230	117	3	70-130/30
541-73-1	1,3-Dichlorobenzene	ND		2760	3130	114	3240	118	3	70-130/30
106-46-7	1,4-Dichlorobenzene	ND		2760	3080	112	3230	117	5	70-130/30
75-71-8	Dichlorodifluoromethane	ND		2760	2900	105	3080	112	6	70-130/30
75-34-3	1,1-Dichloroethane	ND		2760	2840	103	2990	108	5	70-130/30
107-06-2	1,2-Dichloroethane	ND		2760	3100	112	3170	115	2	70-130/30
75-35-4	1,1-Dichloroethene	ND		2760	3010	109	3190	116	6	70-130/30
156-59-2	cis-1,2-Dichloroethene	ND		2760	2850	103	2980	108	4	70-130/30
156-60-5	trans-1,2-Dichloroethene	ND		2760	2930	106	3130	114	7	70-130/30
78-87-5	1,2-Dichloropropane	ND		2760	2820	102	2950	107	5	70-130/30
142-28-9	1,3-Dichloropropane	ND		2760	3040	110	3060	111	1	70-130/30
594-20-7	2,2-Dichloropropane	ND		2760	3140	114	3290	119	5	70-130/30
563-58-6	1,1-Dichloropropene	ND		2760	3110	113	3300	120	6	70-130/30

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 3

Job Number: M96199
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M96199-5MS	R18621.D	1	12/07/10	GK	n/a	n/a	MSR663
M96199-5MSD	R18622.D	1	12/07/10	GK	n/a	n/a	MSR663
M96199-5	R18620.D	1	12/07/10	GK	n/a	n/a	MSR663

The QC reported here applies to the following samples:

Method: SW846 8260B

M96199-4, M96199-5

CAS No.	Compound	M96199-5 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
10061-01-5	cis-1,3-Dichloropropene	ND	2760	3160	115	3250	118	3	70-130/30
10061-02-6	trans-1,3-Dichloropropene	ND	2760	3430	124	3520	128	3	70-130/30
123-91-1	1,4-Dioxane	ND	13800	12800	93	13400	97	5	70-130/30
60-29-7	Ethyl Ether	ND	2760	2700	98	2810	102	4	70-130/30
100-41-4	Ethylbenzene	ND	2760	3190	116	3290	119	3	70-130/30
87-68-3	Hexachlorobutadiene	ND	2760	3440	125	3650	132* a	6	70-130/30
591-78-6	2-Hexanone	ND	2760	2050	74	1790	65* a	14	70-130/30
98-82-8	Isopropylbenzene	ND	2760	3590	130	3780	137* a	5	70-130/30
99-87-6	p-Isopropyltoluene	ND	2760	3160	115	3310	120	5	70-130/30
1634-04-4	Methyl Tert Butyl Ether	ND	2760	2740	99	2840	103	4	70-130/30
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	2760	2300	83	2290	83	0	70-130/30
74-95-3	Methylene bromide	ND	2760	3100	112	3160	115	2	70-130/30
75-09-2	Methylene chloride	ND	2760	2910	106	3060	111	5	70-130/30
91-20-3	Naphthalene	136	2760	2820	97	3040	105	8	70-130/30
103-65-1	n-Propylbenzene	ND	2760	3020	110	3170	115	5	70-130/30
100-42-5	Styrene	ND	2760	3350	122	3450	125	3	70-130/30
994-05-8	tert-Amyl Methyl Ether	ND	2760	2850	103	2950	107	3	70-130/30
637-92-3	tert-Butyl Ethyl Ether	ND	2760	2790	101	2880	104	3	70-130/30
630-20-6	1,1,1,2-Tetrachloroethane	ND	2760	3460	126	3550	129	3	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	ND	2760	2830	103	2880	104	2	70-130/30
127-18-4	Tetrachloroethene	ND	2760	3470	126	3590	130	3	70-130/30
109-99-9	Tetrahydrofuran	ND	2760	2290	83	2270	82	1	70-130/30
108-88-3	Toluene	38.8	2760	3100	111	3230	116	4	70-130/30
87-61-6	1,2,3-Trichlorobenzene	ND	2760	2900	105	3130	114	8	70-130/30
120-82-1	1,2,4-Trichlorobenzene	ND	2760	3160	115	3320	120	5	70-130/30
71-55-6	1,1,1-Trichloroethane	ND	2760	3310	120	3440	125	4	70-130/30
79-00-5	1,1,2-Trichloroethane	ND	2760	2970	108	3000	109	1	70-130/30
79-01-6	Trichloroethene	ND	2760	3070	111	3260	118	6	70-130/30
75-69-4	Trichlorofluoromethane	ND	2760	3280	119	3390	123	3	70-130/30
96-18-4	1,2,3-Trichloropropane	ND	2760	2830	103	2860	104	1	70-130/30
95-63-6	1,2,4-Trimethylbenzene	ND	2760	3110	113	3240	118	4	70-130/30
108-67-8	1,3,5-Trimethylbenzene	ND	2760	3130	114	3270	119	4	70-130/30
75-01-4	Vinyl chloride	ND	2760	3610	131* a	3560	129	1	70-130/30
	m,p-Xylene	26.2	5510	6500	117	6730	122	3	70-130/30
95-47-6	o-Xylene	ND	2760	3270	119	3380	123	3	70-130/30
1330-20-7	Xylene (total)	26.2	8270	9760	118	10100	122	3	70-130/30

Matrix Spike/Matrix Spike Duplicate Summary

Page 3 of 3

Job Number: M96199

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M96199-5MS	R18621.D	1	12/07/10	GK	n/a	n/a	MSR663
M96199-5MSD	R18622.D	1	12/07/10	GK	n/a	n/a	MSR663
M96199-5	R18620.D	1	12/07/10	GK	n/a	n/a	MSR663

The QC reported here applies to the following samples:

Method: SW846 8260B

M96199-4, M96199-5

CAS No.	Surrogate Recoveries	MS	MSD	M96199-5	Limits
1868-53-7	Dibromofluoromethane	112%	118%	113%	70-130%
2037-26-5	Toluene-D8	112%	117%	111%	70-130%
460-00-4	4-Bromofluorobenzene	110%	113%	111%	70-130%

(a) Outside control limits due to possible matrix interference. Refer to Blank Spike.

Volatile Internal Standard Area Summary

Page 1 of 1

Job Number: M96199
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Check Std: MSR660-CC638
Lab File ID: R18518A.D
Instrument ID: GCMSR
Injection Date: 12/02/10
Injection Time: 12:31
Method: SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	317337	9.11	438471	9.99	213609	13.25	271630	15.81	70844	6.69
Upper Limit ^a	634674	9.61	876942	10.49	427218	13.75	543260	16.31	141688	7.19
Lower Limit ^b	158669	8.61	219236	9.49	106805	12.75	135815	15.31	35422	6.19

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSR659-BS	323761	9.11	448580	9.99	215444	13.25	270095	15.81	71381	6.69
MSR660-BS	323761	9.11	448580	9.99	215444	13.25	270095	15.81	71381	6.69
MSR659-BSD	326531	9.11	452960	9.99	216861	13.25	273514	15.81	73209	6.69
MSR660-BSD	326531	9.11	452960	9.99	216861	13.25	273514	15.81	73209	6.69
MSR659-MB	320474	9.11	431431	9.99	199851	13.25	254949	15.81	71480	6.69
MSR660-MB	320474	9.11	431431	9.99	199851	13.25	254949	15.81	71480	6.69
ZZZZZZ	309834	9.11	420716	9.99	196904	13.25	245873	15.81	69783	6.69
ZZZZZZ	308007	9.11	417124	9.99	190501	13.25	244896	15.81	67646	6.71
ZZZZZZ	288979	9.11	389282	9.99	183414	13.25	235783	15.81	62355	6.69
ZZZZZZ	292632	9.11	396284	9.99	184999	13.25	236336	15.81	64809	6.69
M96220-4	281742	9.11	386262	9.99	181869	13.25	227508	15.81	62158	6.69
ZZZZZZ	276989	9.11	373731	9.99	177297	13.25	227356	15.81	59808	6.68
M96220-4MS	280692	9.11	391579	9.99	194390	13.25	244400	15.81	61853	6.69
M96220-4MSD	298804	9.11	414733	9.99	202598	13.25	253326	15.81	64711	6.69
ZZZZZZ	278791	9.11	372916	9.99	176624	13.25	225143	15.81	62074	6.69
ZZZZZZ	275729	9.11	373855	9.99	175041	13.25	222768	15.81	59978	6.69
ZZZZZZ	269282	9.11	365142	9.99	170597	13.25	220727	15.81	59562	6.69
ZZZZZZ	259199	9.12	354139	9.99	175258	13.25	230731	15.81	54613	6.68
ZZZZZZ	278949	9.12	383802	9.99	184040	13.25	252523	15.81	60003	6.68
M96199-6	313591	9.12	432061	9.99	197362	13.25	254520	15.81	67381	6.69
M96199-1	314456	9.11	430312	9.99	198722	13.25	255176	15.81	66840	6.69
M96199-2	305453	9.11	419568	9.99	193658	13.25	250982	15.81	65568	6.69
M96199-3	307978	9.11	416987	9.99	196637	13.25	254056	15.81	67305	6.69

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Internal Standard Area Summary

Page 1 of 1

Job Number: M96199
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Check Std: MSR659-CC637
Lab File ID: R18518.D
Instrument ID: GCMSR
Injection Date: 12/02/10
Injection Time: 12:31
Method: SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	317337	9.11	438471	9.99	213609	13.25	271630	15.81	70844	6.69
Upper Limit ^a	634674	9.61	876942	10.49	427218	13.75	543260	16.31	141688	7.19
Lower Limit ^b	158669	8.61	219236	9.49	106805	12.75	135815	15.31	35422	6.19

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSR659-BS	323761	9.11	448580	9.99	215444	13.25	270095	15.81	71381	6.69
MSR660-BS	323761	9.11	448580	9.99	215444	13.25	270095	15.81	71381	6.69
MSR659-BSD	326531	9.11	452960	9.99	216861	13.25	273514	15.81	73209	6.69
MSR660-BSD	326531	9.11	452960	9.99	216861	13.25	273514	15.81	73209	6.69
MSR659-MB	320474	9.11	431431	9.99	199851	13.25	254949	15.81	71480	6.69
MSR660-MB	320474	9.11	431431	9.99	199851	13.25	254949	15.81	71480	6.69
ZZZZZZ	309834	9.11	420716	9.99	196904	13.25	245873	15.81	69783	6.69
ZZZZZZ	308007	9.11	417124	9.99	190501	13.25	244896	15.81	67646	6.71
ZZZZZZ	288979	9.11	389282	9.99	183414	13.25	235783	15.81	62355	6.69
ZZZZZZ	292632	9.11	396284	9.99	184999	13.25	236336	15.81	64809	6.69
M96220-4	281742	9.11	386262	9.99	181869	13.25	227508	15.81	62158	6.69
ZZZZZZ	276989	9.11	373731	9.99	177297	13.25	227356	15.81	59808	6.68
M96220-4MS	280692	9.11	391579	9.99	194390	13.25	244400	15.81	61853	6.69
M96220-4MSD	298804	9.11	414733	9.99	202598	13.25	253326	15.81	64711	6.69
ZZZZZZ	278791	9.11	372916	9.99	176624	13.25	225143	15.81	62074	6.69
ZZZZZZ	275729	9.11	373855	9.99	175041	13.25	222768	15.81	59978	6.69
ZZZZZZ	269282	9.11	365142	9.99	170597	13.25	220727	15.81	59562	6.69
ZZZZZZ	259199	9.12	354139	9.99	175258	13.25	230731	15.81	54613	6.68
ZZZZZZ	278949	9.12	383802	9.99	184040	13.25	252523	15.81	60003	6.68
M96199-6	313591	9.12	432061	9.99	197362	13.25	254520	15.81	67381	6.69
M96199-1	314456	9.11	430312	9.99	198722	13.25	255176	15.81	66840	6.69
M96199-2	305453	9.11	419568	9.99	193658	13.25	250982	15.81	65568	6.69
M96199-3	307978	9.11	416987	9.99	196637	13.25	254056	15.81	67305	6.69

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Internal Standard Area Summary

Page 1 of 1

Job Number: M96199
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Check Std: MSR663-CC638
Lab File ID: R18607A.D
Instrument ID: GCMSR
Injection Date: 12/07/10
Injection Time: 11:42
Method: SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	245633	9.11	334396	9.98	163836	13.25	209360	15.81	57565	6.69
Upper Limit ^a	491266	9.61	668792	10.48	327672	13.75	418720	16.31	115130	7.19
Lower Limit ^b	122817	8.61	167198	9.48	81918	12.75	104680	15.31	28783	6.19

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSR663-BS	253675	9.11	349518	9.99	168530	13.25	215284	15.81	59624	6.69
MSR663-BSD	263012	9.11	358034	9.99	173848	13.25	219560	15.81	60013	6.69
MSR663-MB	242830	9.11	323578	9.99	149093	13.25	195619	15.81	57708	6.69
ZZZZZZ	241428	9.11	320487	9.99	149117	13.25	198728	15.81	58413	6.69
ZZZZZZ	242379	9.11	321117	9.99	149308	13.25	199531	15.81	57282	6.69
ZZZZZZ	248034	9.12	327937	9.99	152646	13.25	201398	15.81	60138	6.69
ZZZZZZ	244906	9.11	322125	9.99	152153	13.25	200450	15.81	62710	6.69
ZZZZZZ	255050	9.12	338140	9.99	155352	13.25	204976	15.81	59382	6.69
ZZZZZZ	257923	9.12	341496	9.99	157408	13.25	207045	15.81	58768	6.70
ZZZZZZ	252139	9.11	333503	9.99	156694	13.25	206389	15.81	57477	6.69
M96199-4	255355	9.12	346440	9.99	160157	13.25	211754	15.81	58299	6.69
M96199-5	254353	9.11	343345	9.99	158674	13.25	204410	15.81	59499	6.69
M96199-5MS	256007	9.11	351908	9.99	170707	13.25	220648	15.81	58454	6.69
M96199-5MSD	262654	9.11	361449	9.98	175747	13.25	225201	15.81	61397	6.69
ZZZZZZ	242399	9.11	326304	9.99	157304	13.25	215343	15.81	60801	6.68
ZZZZZZ	248803	9.12	337716	9.99	160511	13.25	219898	15.81	61946	6.68
ZZZZZZ	265404	9.11	356400	9.99	166624	13.25	216708	15.81	66027	6.69
ZZZZZZ	261529	9.11	350386	9.99	161029	13.25	210522	15.81	63374	6.69
ZZZZZZ	254737	9.11	345434	9.99	157067	13.25	207079	15.81	62685	6.69
ZZZZZZ	252366	9.11	339362	9.99	158197	13.25	208732	15.81	64542	6.69
ZZZZZZ	254895	9.11	344973	9.99	161294	13.25	210656	15.81	64093	6.69
ZZZZZZ	257016	9.11	340928	9.99	159441	13.25	208644	15.81	64093	6.69
ZZZZZZ	259611	9.11	349349	9.99	161216	13.25	214770	15.81	64838	6.69
ZZZZZZ	46991 ^c	9.12	44006 ^c	10.00	25167 ^c	13.26	20151 ^c	15.82	1387 ^c	6.67

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.

(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

(c) Outside control limits due to possible matrix interference. Confirmed by reanalysis.

Volatile Surrogate Recovery Summary

Page 1 of 1

Job Number: M96199

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Method: SW846 8260B

Matrix: SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
M96199-1	R18541.D	103.0	104.0	101.0
M96199-2	R18542.D	110.0	113.0	111.0
M96199-3	R18543.D	108.0	111.0	108.0
M96199-4	R18619.D	112.0	110.0	107.0
M96199-5	R18620.D	113.0	111.0	111.0
M96199-6	R18540.D	111.0	111.0	110.0
M96199-5MS	R18621.D	112.0	112.0	110.0
M96199-5MSD	R18622.D	118.0	117.0	113.0
MSR660-BS	R18519A.D	105.0	104.0	106.0
MSR660-BSD	R18520A.D	108.0	109.0	108.0
MSR660-MB	R18522A.D	103.0	106.0	104.0
MSR663-BS	R18608A.D	114.0	113.0	111.0
MSR663-BSD	R18609A.D	117.0	117.0	115.0
MSR663-MB	R18611A.D	114.0	114.0	111.0

Surrogate Compounds

Recovery Limits

S1 = Dibromofluoromethane

70-130%

S2 = Toluene-D8

70-130%

S3 = 4-Bromofluorobenzene

70-130%

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Page 1 of 2

Job Number: M96199
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23515-MB	S19763.D	1	12/06/10	PR	12/03/10	OP23515	MSS816

The QC reported here applies to the following samples:

Method: SW846 8270C

M96199-1, M96199-2, M96199-3, M96199-4, M96199-5, M96199-6

CAS No.	Compound	Result	RL	Units	Q
65-85-0	Benzoic acid	ND	500	ug/kg	
95-57-8	2-Chlorophenol	ND	250	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	500	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	500	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	500	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	990	ug/kg	
95-48-7	2-Methylphenol	ND	500	ug/kg	
	3&4-Methylphenol	ND	500	ug/kg	
88-75-5	2-Nitrophenol	ND	500	ug/kg	
100-02-7	4-Nitrophenol	ND	990	ug/kg	
87-86-5	Pentachlorophenol	ND	500	ug/kg	
108-95-2	Phenol	ND	250	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	500	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	500	ug/kg	
83-32-9	Acenaphthene	ND	250	ug/kg	
208-96-8	Acenaphthylene	ND	250	ug/kg	
98-86-2	Acetophenone	ND	500	ug/kg	
62-53-3	Aniline	ND	500	ug/kg	
120-12-7	Anthracene	ND	250	ug/kg	
56-55-3	Benzo(a)anthracene	ND	250	ug/kg	
50-32-8	Benzo(a)pyrene	ND	250	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	250	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	250	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	250	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	250	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	250	ug/kg	
91-58-7	2-Chloronaphthalene	ND	250	ug/kg	
106-47-8	4-Chloroaniline	ND	500	ug/kg	
218-01-9	Chrysene	ND	250	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	250	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	250	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	250	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	250	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	250	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	250	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	250	ug/kg	

Method Blank Summary

Page 2 of 2

Job Number: M96199
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23515-MB	S19763.D	1	12/06/10	PR	12/03/10	OP23515	MSS816

The QC reported here applies to the following samples:

Method: SW846 8270C

M96199-1, M96199-2, M96199-3, M96199-4, M96199-5, M96199-6

CAS No.	Compound	Result	RL	Units	Q
121-14-2	2,4-Dinitrotoluene	ND	500	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	500	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	250	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	250	ug/kg	
132-64-9	Dibenzofuran	ND	250	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	250	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	250	ug/kg	
84-66-2	Diethyl phthalate	ND	250	ug/kg	
131-11-3	Dimethyl phthalate	ND	250	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	250	ug/kg	
206-44-0	Fluoranthene	ND	250	ug/kg	
86-73-7	Fluorene	ND	250	ug/kg	
118-74-1	Hexachlorobenzene	ND	250	ug/kg	
87-68-3	Hexachlorobutadiene	ND	250	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	500	ug/kg	
67-72-1	Hexachloroethane	ND	250	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	250	ug/kg	
78-59-1	Isophorone	ND	250	ug/kg	
91-57-6	2-Methylnaphthalene	ND	250	ug/kg	
91-20-3	Naphthalene	ND	250	ug/kg	
98-95-3	Nitrobenzene	ND	250	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	250	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	250	ug/kg	
85-01-8	Phenanthrene	ND	250	ug/kg	
129-00-0	Pyrene	ND	250	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	250	ug/kg	

CAS No.	Surrogate Recoveries	Limits
367-12-4	2-Fluorophenol	60% 30-130%
4165-62-2	Phenol-d5	63% 30-130%
118-79-6	2,4,6-Tribromophenol	64% 30-130%
4165-60-0	Nitrobenzene-d5	62% 30-130%
321-60-8	2-Fluorobiphenyl	67% 30-130%
1718-51-0	Terphenyl-d14	86% 30-130%

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 3

Job Number: M96199
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23515-BS	S19764.D	1	12/06/10	PR	12/03/10	OP23515	MSS816
OP23515-BSD	S19765.D	1	12/06/10	PR	12/03/10	OP23515	MSS816

The QC reported here applies to the following samples:

Method: SW846 8270C

M96199-1, M96199-2, M96199-3, M96199-4, M96199-5, M96199-6

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic acid	4970	653	13* a	596	12* a	9	30-130/30
95-57-8	2-Chlorophenol	4970	3480	70	3150	63	10	30-130/30
59-50-7	4-Chloro-3-methyl phenol	4970	4090	82	3710	75	10	30-130/30
120-83-2	2,4-Dichlorophenol	4970	3870	78	3490	70	10	30-130/30
105-67-9	2,4-Dimethylphenol	4970	3430	69	3180	64	8	30-130/30
51-28-5	2,4-Dinitrophenol	4970	1520	31	1290	26* a	16	30-130/30
95-48-7	2-Methylphenol	4970	3560	72	3280	66	8	30-130/30
	3&4-Methylphenol	9940	7370	74	6790	68	8	30-130/30
88-75-5	2-Nitrophenol	4970	3690	74	3350	67	10	30-130/30
100-02-7	4-Nitrophenol	4970	3710	75	3360	68	10	30-130/30
87-86-5	Pentachlorophenol	4970	3210	65	2890	58	10	30-130/30
108-95-2	Phenol	4970	3350	67	3070	62	9	30-130/30
95-95-4	2,4,5-Trichlorophenol	4970	3950	79	3570	72	10	30-130/30
88-06-2	2,4,6-Trichlorophenol	4970	3900	78	3580	72	9	30-130/30
83-32-9	Acenaphthene	2490	1960	79	1790	72	9	40-140/30
208-96-8	Acenaphthylene	2490	1450	58	1340	54	8	40-140/30
98-86-2	Acetophenone	2490	1710	69	1560	63	9	40-140/30
62-53-3	Aniline	2490	1450	58	1320	53	9	40-140/30
120-12-7	Anthracene	2490	2060	83	1900	76	8	40-140/30
56-55-3	Benzo(a)anthracene	2490	2430	98	2250	91	8	40-140/30
50-32-8	Benzo(a)pyrene	2490	2240	90	2010	81	11	40-140/30
205-99-2	Benzo(b)fluoranthene	2490	2360	95	2170	87	8	40-140/30
191-24-2	Benzo(g,h,i)perylene	2490	2210	89	2060	83	7	40-140/30
207-08-9	Benzo(k)fluoranthene	2490	2290	92	2090	84	9	40-140/30
101-55-3	4-Bromophenyl phenyl ether	2490	2070	83	1900	76	9	40-140/30
85-68-7	Butyl benzyl phthalate	2490	2550	103	2310	93	10	40-140/30
91-58-7	2-Chloronaphthalene	2490	1890	76	1750	70	8	40-140/30
106-47-8	4-Chloroaniline	2490	1610	65	1470	59	9	40-140/30
218-01-9	Chrysene	2490	2520	101	2320	93	8	40-140/30
111-91-1	bis(2-Chloroethoxy)methane	2490	1780	72	1610	65	10	40-140/30
111-44-4	bis(2-Chloroethyl)ether	2490	1680	68	1510	61	11	40-140/30
108-60-1	bis(2-Chloroisopropyl)ether	2490	1600	64	1450	58	10	40-140/30
95-50-1	1,2-Dichlorobenzene	2490	1660	67	1490	60	11	40-140/30
122-66-7	1,2-Diphenylhydrazine	2490	1860	75	1690	68	10	40-140/30
541-73-1	1,3-Dichlorobenzene	2490	1600	64	1440	58	11	40-140/30
106-46-7	1,4-Dichlorobenzene	2490	1620	65	1460	59	10	40-140/30

Blank Spike/Blank Spike Duplicate Summary

Page 2 of 3

Job Number: M96199
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23515-BS	S19764.D	1	12/06/10	PR	12/03/10	OP23515	MSS816
OP23515-BSD	S19765.D	1	12/06/10	PR	12/03/10	OP23515	MSS816

The QC reported here applies to the following samples:

Method: SW846 8270C

M96199-1, M96199-2, M96199-3, M96199-4, M96199-5, M96199-6

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
121-14-2	2,4-Dinitrotoluene	2490	2170	87	1960	79	10	40-140/30
606-20-2	2,6-Dinitrotoluene	2490	2090	84	1900	76	10	40-140/30
91-94-1	3,3'-Dichlorobenzidine	2490	2040	82	1890	76	8	40-140/30
53-70-3	Dibenzo(a,h)anthracene	2490	2440	98	2310	93	5	40-140/30
132-64-9	Dibenzofuran	2490	1950	78	1780	72	9	40-140/30
84-74-2	Di-n-butyl phthalate	2490	2380	96	2180	88	9	40-140/30
117-84-0	Di-n-octyl phthalate	2490	3170	128	2760	111	14	40-140/30
84-66-2	Diethyl phthalate	2490	2190	88	1990	80	10	40-140/30
131-11-3	Dimethyl phthalate	2490	2100	85	1900	76	10	40-140/30
117-81-7	bis(2-Ethylhexyl)phthalate	2490	2660	107	2430	98	9	40-140/30
206-44-0	Fluoranthene	2490	2230	90	2080	84	7	40-140/30
86-73-7	Fluorene	2490	2050	82	1890	76	8	40-140/30
118-74-1	Hexachlorobenzene	2490	2070	83	1890	76	9	40-140/30
87-68-3	Hexachlorobutadiene	2490	1720	69	1540	62	11	40-140/30
77-47-4	Hexachlorocyclopentadiene	2490	902	36* a	788	32* a	13	40-140/30
67-72-1	Hexachloroethane	2490	1570	63	1410	57	11	40-140/30
193-39-5	Indeno(1,2,3-cd)pyrene	2490	2410	97	2250	91	7	40-140/30
78-59-1	Isophorone	2490	1780	72	1630	66	9	40-140/30
91-57-6	2-Methylnaphthalene	2490	1820	73	1670	67	9	40-140/30
91-20-3	Naphthalene	2490	1780	72	1620	65	9	40-140/30
98-95-3	Nitrobenzene	2490	1640	66	1470	59	11	40-140/30
621-64-7	N-Nitroso-di-n-propylamine	2490	1860	75	1690	68	10	40-140/30
86-30-6	N-Nitrosodiphenylamine	2490	2110	85	1940	78	8	40-140/30
85-01-8	Phenanthrene	2490	1970	79	1800	72	9	40-140/30
129-00-0	Pyrene	2490	2300	93	2060	83	11	40-140/30
120-82-1	1,2,4-Trichlorobenzene	2490	1720	69	1560	63	10	40-140/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	69%	62%	30-130%
4165-62-2	Phenol-d5	72%	66%	30-130%
118-79-6	2,4,6-Tribromophenol	84%	77%	30-130%
4165-60-0	Nitrobenzene-d5	70%	63%	30-130%
321-60-8	2-Fluorobiphenyl	76%	70%	30-130%
1718-51-0	Terphenyl-d14	96%	86%	30-130%

Blank Spike/Blank Spike Duplicate Summary

Page 3 of 3

Job Number: M96199

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23515-BS	S19764.D	1	12/06/10	PR	12/03/10	OP23515	MSS816
OP23515-BSD	S19765.D	1	12/06/10	PR	12/03/10	OP23515	MSS816

The QC reported here applies to the following samples:

Method: SW846 8270C

M96199-1, M96199-2, M96199-3, M96199-4, M96199-5, M96199-6

(a) Outside control limits. Blank Spike meets program technical requirements.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: M96199

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23515-MS	S19766.D	1	12/06/10	PR	12/03/10	OP23515	MSS816
OP23515-MSD	S19767.D	1	12/06/10	PR	12/03/10	OP23515	MSS816
M96225-8	S19781.D	1	12/07/10	PR	12/03/10	OP23515	MSS816

The QC reported here applies to the following samples:

Method: SW846 8270C

M96199-1, M96199-2, M96199-3, M96199-4, M96199-5, M96199-6

CAS No.	Compound	M96225-8 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic acid	ND		6610	2310	35	1850	28* a	22	30-130/30
95-57-8	2-Chlorophenol	ND		6610	4170	63	3700	56	12	30-130/30
59-50-7	4-Chloro-3-methyl phenol	ND		6610	5010	76	4340	66	14	30-130/30
120-83-2	2,4-Dichlorophenol	ND		6610	4720	71	4220	64	11	30-130/30
105-67-9	2,4-Dimethylphenol	167		6610	4500	66	4200	61	7	30-130/30
51-28-5	2,4-Dinitrophenol	ND		6610	1080	16* a	ND	0* a	200* a	30-130/30
95-48-7	2-Methylphenol	98.2		6610	4510	67	4040	60	11	30-130/30
	3&4-Methylphenol	727		13200	9480	66	8920	62	6	30-130/30
88-75-5	2-Nitrophenol	ND		6610	2520	38	2090	32	19	30-130/30
100-02-7	4-Nitrophenol	ND		6610	4530	69	4380	67	3	30-130/30
87-86-5	Pentachlorophenol	ND		6610	5030	76	4200	64	18	30-130/30
108-95-2	Phenol	ND		6610	4160	63	4050	62	3	30-130/30
95-95-4	2,4,5-Trichlorophenol	ND		6610	5160	78	4570	69	12	30-130/30
88-06-2	2,4,6-Trichlorophenol	ND		6610	5010	76	4560	69	9	30-130/30
83-32-9	Acenaphthene	3830		3300	5810	60	10300	197* b	56* c	40-140/30
208-96-8	Acenaphthylene	471		3300	2160	51	5780	161* b	91* c	40-140/30
98-86-2	Acetophenone	ND		3300	2030	61	1810	55	11	40-140/30
62-53-3	Aniline	ND		3300	1460	44	1310	40	11	40-140/30
120-12-7	Anthracene	4020		3300	6290	69	27400	710* b	125* c	40-140/30
56-55-3	Benzo(a)anthracene	5400		3300	7390	60	36200	936* b	132* c	40-140/30
50-32-8	Benzo(a)pyrene	3260		3300	5160	58	20400	521* b	119* c	40-140/30
205-99-2	Benzo(b)fluoranthene	3300		3300	4640	41	25500	675* b	138* c	40-140/30
191-24-2	Benzo(g,h,i)perylene	998		3300	4750	114	8590	231* b	58* c	40-140/30
207-08-9	Benzo(k)fluoranthene	2590		3300	4470	57	6590	122	38* c	40-140/30
101-55-3	4-Bromophenyl phenyl ether	ND		3300	2620	79	2410	73	8	40-140/30
85-68-7	Butyl benzyl phthalate	ND		3300	3140	95	2920	89	7	40-140/30
91-58-7	2-Chloronaphthalene	ND		3300	2260	68	2070	63	9	40-140/30
106-47-8	4-Chloroaniline	ND		3300	1600	48	1650	50	3	40-140/30
218-01-9	Chrysene	5550		3300	7510	59	32400	816* b	125* c	40-140/30
111-91-1	bis(2-Chloroethoxy)methane	ND		3300	2070	63	1830	56	12	40-140/30
111-44-4	bis(2-Chloroethyl)ether	ND		3300	2060	62	1750	53	16	40-140/30
108-60-1	bis(2-Chloroisopropyl)ether	ND		3300	1900	58	1620	49	16	40-140/30
95-50-1	1,2-Dichlorobenzene	ND		3300	1920	58	1660	50	15	40-140/30
122-66-7	1,2-Diphenylhydrazine	ND		3300	2150	65	2680	81	22	40-140/30
541-73-1	1,3-Dichlorobenzene	ND		3300	1860	56	1530	46	19	40-140/30
106-46-7	1,4-Dichlorobenzene	ND		3300	1880	57	1600	49	16	40-140/30

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 3

Job Number: M96199
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23515-MS	S19766.D	1	12/06/10	PR	12/03/10	OP23515	MSS816
OP23515-MSD	S19767.D	1	12/06/10	PR	12/03/10	OP23515	MSS816
M96225-8	S19781.D	1	12/07/10	PR	12/03/10	OP23515	MSS816

The QC reported here applies to the following samples:

Method: SW846 8270C

M96199-1, M96199-2, M96199-3, M96199-4, M96199-5, M96199-6

CAS No.	Compound	M96225-8 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
121-14-2	2,4-Dinitrotoluene	ND		3300	1770	54	1680	51	5	40-140/30
606-20-2	2,6-Dinitrotoluene	ND		3300	1890	57	1640	50	14	40-140/30
91-94-1	3,3'-Dichlorobenzidine	ND		3300	ND	0* b	1270	39* b	200* c	40-140/30
53-70-3	Dibenzo(a,h)anthracene	542		3300	3700	96	6190	172* b	50* c	40-140/30
132-64-9	Dibenzofuran	2010		3300	4200	66	9510	228* b	77* c	40-140/30
84-74-2	Di-n-butyl phthalate	ND		3300	2830	86	2720	83	4	40-140/30
117-84-0	Di-n-octyl phthalate	ND		3300	2990	91	2270	69	27	40-140/30
84-66-2	Diethyl phthalate	ND		3300	2680	81	2380	72	12	40-140/30
131-11-3	Dimethyl phthalate	ND		3300	2490	75	2240	68	11	40-140/30
117-81-7	bis(2-Ethylhexyl)phthalate	ND		3300	3300	100	2390	73	32* c	40-140/30
206-44-0	Fluoranthene	10500		3300	10900	12* d	52900	1288* d	132* d	40-140/30
86-73-7	Fluorene	3610		3300	6000	72	17200	413* b	97* c	40-140/30
118-74-1	Hexachlorobenzene	ND		3300	2490	75	2300	70	8	40-140/30
87-68-3	Hexachlorobutadiene	ND		3300	2010	61	1750	53	14	40-140/30
77-47-4	Hexachlorocyclopentadiene	ND		3300	ND	0* a	ND	0* a	nc	40-140/30
67-72-1	Hexachloroethane	ND		3300	527	16* b	392	12* b	29	40-140/30
193-39-5	Indeno(1,2,3-cd)pyrene	1150		3300	4570	104	9400	251* b	69* c	40-140/30
78-59-1	Isophorone	ND		3300	2110	64	1910	58	10	40-140/30
91-57-6	2-Methylnaphthalene	2010		3300	3920	58	6700	143* b	52* c	40-140/30
91-20-3	Naphthalene	5360		3300	6450	33* b	6900	47	7	40-140/30
98-95-3	Nitrobenzene	ND		3300	1740	53	1530	46	13	40-140/30
621-64-7	N-Nitroso-di-n-propylamine	ND		3300	2140	65	1920	58	11	40-140/30
86-30-6	N-Nitrosodiphenylamine	ND		3300	2910	88	4180	127	36* c	40-140/30
85-01-8	Phenanthrene	12700		3300	14900	67	60500	1453* d	121* c	40-140/30
129-00-0	Pyrene	7840		3300	11700	117	45300	1138* d	118* c	40-140/30
120-82-1	1,2,4-Trichlorobenzene	ND		3300	2040	62	1800	55	13	40-140/30

CAS No.	Surrogate Recoveries	MS	MSD	M96225-8	Limits
367-12-4	2-Fluorophenol	62%	55%	61%	30-130%
4165-62-2	Phenol-d5	64%	56%	62%	30-130%
118-79-6	2,4,6-Tribromophenol	82%	77%	77%	30-130%
4165-60-0	Nitrobenzene-d5	56%	51%	56%	30-130%
321-60-8	2-Fluorobiphenyl	68%	63%	70%	30-130%
1718-51-0	Terphenyl-d14	84%	75%	61%	30-130%

Matrix Spike/Matrix Spike Duplicate Summary

Page 3 of 3

Job Number: M96199

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23515-MS	S19766.D	1	12/06/10	PR	12/03/10	OP23515	MSS816
OP23515-MSD	S19767.D	1	12/06/10	PR	12/03/10	OP23515	MSS816
M96225-8	S19781.D	1	12/07/10	PR	12/03/10	OP23515	MSS816

The QC reported here applies to the following samples:

Method: SW846 8270C

M96199-1, M96199-2, M96199-3, M96199-4, M96199-5, M96199-6

- (a) Outside control limits. Blank Spike meets program technical requirements.
- (b) Outside control limits due to possible matrix interference. Refer to Blank Spike.
- (c) High RPD due to possible matrix interference and/or sample non-homogeneity.
- (d) Outside control limits due to high level in sample relative to spike amount.

Semivolatile Internal Standard Area Summary

Page 1 of 1

Job Number: M96199
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Check Std: MSS816-CC805	Injection Date: 12/06/10
Lab File ID: S19759.D	Injection Time: 18:39
Instrument ID: GCMSS	Method: SW846 8270C

	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Check Std	322489	6.08	1256165	7.45	646294	9.69	1060346	11.91	987196	16.28	919151	18.52
Upper Limit ^a	644978	6.58	2512330	7.95	1292588	10.19	2120692	12.41	1974392	16.78	1838302	19.02
Lower Limit ^b	161245	5.58	628083	6.95	323147	9.19	530173	11.41	493598	15.78	459576	18.02

Lab Sample ID	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
ZZZZZZ	340673	6.08	1364807	7.45	675111	9.69	1087964	11.90	1014064	16.27	923460	18.52
OP23509-LB	379914	6.08	1585362	7.45	790025	9.69	1239902	11.90	1132605	16.27	1017663	18.52
ZZZZZZ	292899	6.08	1235436	7.45	620799	9.69	975647	11.90	825876	16.27	703727	18.52
OP23515-MB	398327	6.08	1689629	7.45	857569	9.69	1325625	11.90	1241886	16.27	1005164	18.52
OP23515-BS	402764	6.08	1586588	7.45	805282	9.69	1298048	11.90	1136922	16.27	955170	18.52
OP23515-BSD	390651	6.08	1539718	7.45	778704	9.69	1243198	11.90	1125802	16.27	983844	18.52
OP23515-MS	428153	6.08	1699122	7.45	837421	9.69	1282463	11.91	985056	16.29	1088928	18.54
OP23515-MSD	377663	6.08	1495614	7.45	717064	9.69	1071504	11.93	1070231	16.36	1502243	18.62
M96199-1	451065	6.08	1875350	7.45	896768	9.69	1290843	11.92	1156321	16.30	1439875	18.56
M96199-2	395834	6.08	1629310	7.45	782701	9.69	1159708	11.91	1189954	16.30	1379257	18.56
M96199-3	411292	6.08	1684834	7.45	786925	9.69	1143251	11.92	1244710	16.31	1293265	18.57
M96199-4	416072	6.08	1724205	7.45	823265	9.69	1195569	11.92	1244021	16.29	1441865	18.54
M96199-5	397842	6.08	1531859	7.45	782504	9.69	1200439	11.91	1234265	16.29	1415889	18.54
M96199-6	453939	6.08	1858791	7.46	840997	9.69	1191468	11.92	942195	16.31	1429479	18.56
ZZZZZZ	326939	6.08	1381301	7.45	685978	9.69	1084523	11.92	1189560	16.32	1278510	18.57
ZZZZZZ	403960	6.08	1654348	7.45	767608	9.69	1125063	11.92	1179223	16.30	1255055	18.56
ZZZZZZ	314863	6.08	1301468	7.45	646407	9.69	1016545	11.91	1052293	16.30	1153066	18.55
ZZZZZZ	426461	6.08	1717899	7.45	792666	9.69	1159318	11.92	1153544	16.30	1246122	18.56
ZZZZZZ	387464	6.08	1562360	7.45	734552	9.69	1094293	11.91	1219035	16.30	1142038	18.55
ZZZZZZ	395148	6.08	1632914	7.45	770297	9.69	1121464	11.92	1247355	16.29	1270905	18.54
ZZZZZZ	448418	6.08	1836022	7.45	861336	9.69	1229516	11.92	1332448	16.30	1294976	18.56
M96225-8	431072	6.08	1748528	7.46	802270	9.69	1143377	11.92	1250760	16.31	1261628	18.56
M95397-50	346797	6.08	1454225	7.45	707354	9.69	1105851	11.91	980884	16.28	881437	18.53

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Page 1 of 1

Job Number: M96199
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Check Std: MSS818-CC805	Injection Date: 12/07/10
Lab File ID: S19786.D	Injection Time: 13:20
Instrument ID: GCMSS	Method: SW846 8270C

	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Check Std	307796	6.07	1219821	7.45	611674	9.68	978838	11.90	943971	16.27	896277	18.52
Upper Limit ^a	615592	6.57	2439642	7.95	1223348	10.18	1957676	12.40	1887942	16.77	1792554	19.02
Lower Limit ^b	153898	5.57	609911	6.95	305837	9.18	489419	11.40	471986	15.77	448139	18.02

Lab Sample ID	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
M96199-1	336899	6.07	1411285	7.44	687713	9.68	1081429	11.90	957059	16.27	913836	18.52
ZZZZZZ	325799	6.07	1382829	7.44	696309	9.68	1105261	11.90	993275	16.27	967970	18.52

IS 1 = 1,4-Dichlorobenzene-d4

IS 2 = Naphthalene-d8

IS 3 = Acenaphthene-D10

IS 4 = Phenanthrene-d10

IS 5 = Chrysene-d12

IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.

(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Surrogate Recovery Summary

Page 1 of 1

Job Number: M96199

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Method: SW846 8270C

Matrix: SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
M96199-1	S19787.D	74.0	77.0	82.0	72.0	88.0	110.0
M96199-1	S19768.D	66.0	67.0	90.0	65.0	74.0	83.0
M96199-2	S19769.D	62.0	63.0	82.0	56.0	68.0	69.0
M96199-3	S19770.D	56.0	57.0	79.0	57.0	64.0	65.0
M96199-4	S19771.D	60.0	61.0	84.0	54.0	67.0	70.0
M96199-5	S19772.D	57.0	59.0	80.0	60.0	66.0	73.0
M96199-6	S19773.D	62.0	64.0	86.0	56.0	73.0	91.0
OP23515-BS	S19764.D	69.0	72.0	84.0	70.0	76.0	96.0
OP23515-BSD	S19765.D	62.0	66.0	77.0	63.0	70.0	86.0
OP23515-MB	S19763.D	60.0	63.0	64.0	62.0	67.0	86.0
OP23515-MS	S19766.D	62.0	64.0	82.0	56.0	68.0	84.0
OP23515-MSD	S19767.D	55.0	56.0	77.0	51.0	63.0	75.0

Surrogate Compounds

Recovery Limits

S1 = 2-Fluorophenol	30-130%
S2 = Phenol-d5	30-130%
S3 = 2,4,6-Tribromophenol	30-130%
S4 = Nitrobenzene-d5	30-130%
S5 = 2-Fluorobiphenyl	30-130%
S6 = Terphenyl-d14	30-130%

6.5.1

6

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Page 1 of 1

Job Number: M96199

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GBH926-MB	BH17783.D	1	12/06/10	AP	n/a	n/a	GBH926

The QC reported here applies to the following samples:

Method: MADEP VPH REV 1.1

M96199-1, M96199-2, M96199-3, M96199-4, M96199-5, M96199-6

CAS No.	Compound	Result	RL	Units	Q
	C5- C8 Aliphatics (Unadj.)	ND	5000	ug/kg	
	C9- C12 Aliphatics (Unadj.)	ND	5000	ug/kg	
	C9- C10 Aromatics (Unadj.)	ND	5000	ug/kg	
	C5- C8 Aliphatics	ND	5000	ug/kg	
	C9- C12 Aliphatics	ND	5000	ug/kg	

CAS No.	Surrogate Recoveries	Limits
615-59-8	2,5-Dibromotoluene	82% 70-130%
615-59-8	2,5-Dibromotoluene	77% 70-130%

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 1

Job Number: M96199

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GBH926-BSP	BH17784.D	1	12/06/10	AP	n/a	n/a	GBH926
GBH926-BSD	BH17785.D	1	12/06/10	AP	n/a	n/a	GBH926

The QC reported here applies to the following samples:

Method: MADEP VPH REV 1.1

M96199-1, M96199-2, M96199-3, M96199-4, M96199-5, M96199-6

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
	C5- C8 Aliphatics (Unadj.)	7500	5550	74	5590	75	1	70-130/25
	C9- C12 Aliphatics (Unadj.)	7500	8220	110	8300	111	1	70-130/25
	C9- C10 Aromatics (Unadj.)	2500	2520	101	2550	102	1	70-130/25

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
615-59-8	2,5-Dibromotoluene	101%	107%	70-130%
615-59-8	2,5-Dibromotoluene	96%	102%	70-130%

Volatile Surrogate Recovery Summary

Page 1 of 1

Job Number: M96199

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Method: MADEP VPH REV 1.1

Matrix: SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a	S1 ^b
M96199-1	BH17786.D	108.0	101.0
M96199-2	BH17787.D	100.0	93.0
M96199-3	BH17788.D	103.0	96.0
M96199-4	BH17789.D	114.0	107.0
M96199-5	BH17790.D	95.0	88.0
M96199-6	BH17791.D	106.0	97.0
GBH926-BSD	BH17785.D	107.0	102.0
GBH926-BSP	BH17784.D	101.0	96.0
GBH926-MB	BH17783.D	82.0	77.0

Surrogate Compounds	Recovery Limits
------------------------	--------------------

S1 = 2,5-Dibromotoluene	70-130%
-------------------------	---------

(a) Recovery from GC signal #1

(b) Recovery from GC signal #2

7.3.1

7

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Page 1 of 1

Job Number: M96199

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23505-MB	BI2592B.D	1	12/07/10	JD	12/02/10	OP23505	GBI98

The QC reported here applies to the following samples:

Method: MADEP EPH REV 1.1

M96199-1, M96199-2, M96199-3, M96199-4, M96199-5, M96199-6

CAS No.	Compound	Result	RL	Units	Q
	C11-C22 Aromatics (Unadj.)	ND	18000	ug/kg	
	C9-C18 Aliphatics	ND	9000	ug/kg	
	C19-C36 Aliphatics	ND	9000	ug/kg	
	C11-C22 Aromatics	ND	18000	ug/kg	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	74% 40-140%
321-60-8	2-Fluorobiphenyl	85% 40-140%
580-13-2	2-Bromonaphthalene	51% 40-140%
3386-33-2	1-Chlorooctadecane	52% 40-140%

8.1.1

8

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 1

Job Number: M96199

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23505-BS	BI2590A.D	1	12/07/10	JD	12/02/10	OP23505	GBI98
OP23505-BSD	BI2591A.D	1	12/07/10	JD	12/02/10	OP23505	GBI98

The QC reported here applies to the following samples:

Method: MADEP EPH REV 1.1

M96199-1, M96199-2, M96199-3, M96199-4, M96199-5, M96199-6

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
	C11-C22 Aromatics (Unadj.)	71900	68400	95 ^a	76100	106 ^a	11 ^a	40-140/25
	C9-C18 Aliphatics	27000	12200	45	11000	41	10	40-140/25
	C19-C36 Aliphatics	36000	20400	57	19900	55	2	40-140/25

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
84-15-1	o-Terphenyl	76%	86%	40-140%
321-60-8	2-Fluorobiphenyl	85%	97%	40-140%
580-13-2	2-Bromonaphthalene	64%	67%	40-140%
3386-33-2	1-Chlorooctadecane	44%	44%	40-140%

Sample	Compound	Col #1	Col #2	Breakthrough	Limit
OP23505-BS	2-Methylnaphthalene	2430	270	10.0% *	5.0
OP23505-BS	Naphthalene	2060	381	15.6% *	5.0
OP23505-BSD	2-Methylnaphthalene	2470	456	15.6% *	5.0
OP23505-BSD	Naphthalene	2090	567	21.3% *	5.0

(a) Aromatic breakthrough (naphthalene and/or 2-methylnaphthalene) exceeded 5% method limit. Results confirmed by refractionation.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M96199
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23505-MS	BJ69.D	1	12/04/10	KD	12/02/10	OP23505	GBJ2
OP23505-MSD	BJ70.D	1	12/04/10	KD	12/02/10	OP23505	GBJ2
M96199-5	BJ75.D	1	12/04/10	KD	12/02/10	OP23505	GBJ2

The QC reported here applies to the following samples: Method: MADEP EPH REV 1.1

M96199-1, M96199-2, M96199-3, M96199-4, M96199-5, M96199-6

CAS No.	Compound	M96199-5 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
	C11-C22 Aromatics (Unadj.)	67400	77000	139000	93	167000	131	18	40-140/25
	C9-C18 Aliphatics	ND	28900	25200	87	22300	78	12	40-140/25
	C19-C36 Aliphatics	12000	38500	50500	100	40600	75	22	40-140/25

CAS No.	Surrogate Recoveries	MS	MSD	M96199-5	Limits
84-15-1	o-Terphenyl	112%	128%	121%	40-140%
321-60-8	2-Fluorobiphenyl	93%	94%	93%	40-140%
580-13-2	2-Bromonaphthalene	85%	89%	87%	40-140%
3386-33-2	1-Chlorooctadecane	68%	62%	74%	40-140%

8.3.1
8

Semivolatile Surrogate Recovery Summary

Page 1 of 1

Job Number: M96199

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Method: MADEP EPH REV 1.1

Matrix: SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a	S2 ^a	S3 ^a	S4 ^b
M96199-1	BJ71.D	181.0* ^c	89.0	87.0	61.0
M96199-2	BG23601.D	78.0	91.0	92.0	17.0* ^d
M96199-3	BG23602.D	63.0	97.0	80.0	26.0* ^d
M96199-4	BJ74.D	103.0	87.0	82.0	61.0
M96199-5	BJ75.D	121.0	93.0	87.0	74.0
M96199-6	BJ76.D	118.0	88.0	85.0	64.0
OP23505-BS	BI2590A.D	76.0	85.0	64.0	44.0
OP23505-BSD	BI2591A.D	86.0	97.0	67.0	44.0
OP23505-MB	BI2592B.D	74.0	85.0	51.0	52.0
OP23505-MS	BJ69.D	112.0	93.0	85.0	68.0
OP23505-MSD	BJ70.D	128.0	94.0	89.0	62.0

Surrogate Compounds

Recovery Limits

S1 = o-Terphenyl	40-140%
S2 = 2-Fluorobiphenyl	40-140%
S3 = 2-Bromonaphthalene	40-140%
S4 = 1-Chlorooctadecane	40-140%

(a) Recovery from GC signal #1

(b) Recovery from GC signal #2

(c) Outside control limits due to possible matrix interference.

(d) Outside control limits due to possible matrix interference. Confirmed by refractionation.

8.4.1
8

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M96199
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16325
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 12/01/10

Metal	RL	IDL	MDL	MB raw	final
Aluminum	20	1.5	1.5		
Antimony	1.0	.09	.12	-0.020	<1.0
Arsenic	1.0	.1	.13	-0.040	<1.0
Barium	5.0	.042	.2	0.18	<5.0
Beryllium	0.40	.014	.015	0.0	<0.40
Boron	10	.033	.12		
Cadmium	0.40	.011	.017	-0.010	<0.40
Calcium	500	2.3	2.3		
Chromium	1.0	.047	.047	0.020	<1.0
Cobalt	5.0	.017	.017		
Copper	2.5	.086	.15		
Gold	5.0	.16	.16		
Iron	10	.39	.54		
Lead	1.0	.15	.15	-0.020	<1.0
Magnesium	500	3.7	4.2		
Manganese	1.5	.011	.092		
Molybdenum	10	.021	.026		
Nickel	4.0	.021	.028	-0.010	<4.0
Palladium	5.0	.24	.24		
Platinum	5.0	.73	.73		
Potassium	500	2.9	3.6		
Selenium	1.0	.11	.19	0.15	<1.0
Silicon	10	.12	.47		
Silver	0.50	.06	.06	0.010	<0.50
Sodium	500	1.5	4.2		
Strontium	1.0	.013	.015		
Thallium	1.0	.07	.12	0.090	<1.0
Tin	10	.036	.036		
Titanium	5.0	.057	.057		
Tungsten	10	.48	.57		
Vanadium	1.0	.073	.073	-0.020	<1.0
Zinc	2.0	.024	.28	0.17	<2.0

Associated samples MP16325: M96199-1, M96199-2, M96199-3, M96199-4, M96199-5, M96199-6

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M96199
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16325
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M96199
 Account: HALEYALD - Haley & Aldrich
 Project: Former Energy International Parcel, MA

QC Batch ID: MP16325
 Matrix Type: SOLID

Methods: SW846 6010C
 Units: mg/kg

Prep Date: 12/01/10 12/01/10

Metal	M96199-5 Original MS		Spikelot MPICP	% Rec	QC Limits	M96199-5 Original DUP		RPD	QC Limits
Aluminum									
Antimony	2.4	17.3	41.9	35.6 (a)	75-125	2.4	1.4	52.6 (c)	0-20
Arsenic	18.9	56.7	41.9	90.3	75-125	18.9	18.3	3.2	0-20
Barium	198	273	168	44.8 (a)	75-125	198	115	53.0 (c)	0-20
Beryllium	0.65	35.1	41.9	82.3	75-125	0.65	0.63	3.1	0-20
Boron									
Cadmium	0.54	40.0	41.9	94.2	75-125	0.54	0.51	5.7	0-20
Calcium									
Chromium	17.6	50.8	41.9	79.3	75-125	17.6	15.6	12.0	0-20
Cobalt									
Copper									
Gold									
Iron									
Lead	912	965	83.8	63.3 (b)	75-125	912	940	3.0	0-20
Magnesium									
Manganese									
Molybdenum									
Nickel	15.4	52.6	41.9	88.8	75-125	15.4	15.2	1.3	0-20
Palladium									
Platinum									
Potassium									
Selenium	0.97	37.4	41.9	87.0	75-125	0.97	1.1	12.6	0-20
Silicon									
Silver	0.30	16.2	16.8	94.9	75-125	0.30	0.28	6.9	0-20
Sodium									
Strontium									
Thallium	0.0	35.7	41.9	85.2	75-125	0.0	0.14	200.0(d)	0-20
Tin									
Titanium									
Tungsten									
Vanadium	24.6	63.7	41.9	93.4	75-125	24.6	26.1	5.9	0-20
Zinc	145	183	41.9	90.7	75-125	145	143	1.4	0-20

Associated samples MP16325: M96199-1, M96199-2, M96199-3, M96199-4, M96199-5, M96199-6

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M96199
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16325
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes

- (*) Outside of QC limits
- (N) Matrix Spike Rec. outside of QC limits
- (anr) Analyte not requested
- (a) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity. Post spike is not within acceptable range.
- (b) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
- (c) High RPD due to possible matrix interference and/or sample non-homogeneity.
- (d) RPD acceptable due to low duplicate and sample concentrations.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M96199
 Account: HALEYALD - Haley & Aldrich
 Project: Former Energy International Parcel, MA

QC Batch ID: MP16325
 Matrix Type: SOLID

Methods: SW846 6010C
 Units: mg/kg

Prep Date: 12/01/10

12/01/10

Metal	BSP Result	Spikelot MPICP	% Rec	QC Limits	BSD Result	Spikelot MPICP	% Rec	BSD RPD	QC Limit
Aluminum									
Antimony	50.2	50	100.4	80-120	49.5	50	99.0	1.4	20
Arsenic	50.5	50	101.0	80-120	49.4	50	98.8	2.2	20
Barium	184	200	92.0	80-120	182	200	91.0	1.1	20
Beryllium	45.5	50	91.0	80-120	45.4	50	90.8	0.2	20
Boron									
Cadmium	51.8	50	103.6	80-120	50.8	50	101.6	1.9	20
Calcium									
Chromium	49.4	50	98.8	80-120	49.3	50	98.6	0.2	20
Cobalt									
Copper									
Gold									
Iron									
Lead	98.1	100	98.1	80-120	96.7	100	96.7	1.4	20
Magnesium									
Manganese									
Molybdenum									
Nickel	50.8	50	101.6	80-120	50.0	50	100.0	1.6	20
Palladium									
Platinum									
Potassium									
Selenium	50.7	50	101.4	80-120	49.9	50	99.8	1.6	20
Silicon									
Silver	20.6	20	103.0	80-120	20.8	20	104.0	1.0	20
Sodium									
Strontium									
Thallium	51.3	50	102.6	80-120	50.3	50	100.6	2.0	20
Tin									
Titanium									
Tungsten									
Vanadium	51.4	50	102.8	80-120	51.5	50	103.0	0.2	20
Zinc	50.2	50	100.4	80-120	49.2	50	98.4	2.0	20

Associated samples MP16325: M96199-1, M96199-2, M96199-3, M96199-4, M96199-5, M96199-6

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M96199
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16325
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M96199
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16325
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 12/01/10

Metal	LCS Result	Spikelot MPLCS70	% Rec	QC Limits
Aluminum				
Antimony	80.9	121	66.9	8-219
Arsenic	105	109	96.3	83-117
Barium	279	325	85.8	83-117
Beryllium	80.5	92.1	87.4	84-116
Boron				
Cadmium	111	110	100.9	81-119
Calcium				
Chromium	86.0	93.4	92.1	81-120
Cobalt				
Copper				
Gold				
Iron				
Lead	139	152	91.4	79-121
Magnesium				
Manganese				
Molybdenum				
Nickel	108	109	99.1	81-118
Palladium				
Platinum				
Potassium				
Selenium	201	207	97.1	79-120
Silicon				
Silver	52.3	51.9	100.8	66-134
Sodium				
Strontium				
Thallium	167	171	97.7	78-122
Tin				
Titanium				
Tungsten				
Vanadium	105	110	95.5	77-124
Zinc	279	299	93.3	82-118

Associated samples MP16325: M96199-1, M96199-2, M96199-3, M96199-4, M96199-5, M96199-6

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M96199
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16325
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: M96199
 Account: HALEYALD - Haley & Aldrich
 Project: Former Energy International Parcel, MA

QC Batch ID: MP16325
 Matrix Type: SOLID

Methods: SW846 6010C
 Units: ug/l

Prep Date: 12/01/10

Metal	M96199-5 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony	27.9	24.3	12.9 (a)	0-10
Arsenic	223	242	8.3	0-10
Barium	2350	2440	3.7	0-10
Beryllium	7.70	7.90	2.6	0-10
Boron				
Cadmium	6.40	6.60	3.1	0-10
Calcium				
Chromium	208	231	11.1 (b)	0-10
Cobalt				
Copper				
Gold				
Iron				
Lead	10800	11900	9.8	0-10
Magnesium				
Manganese				
Molybdenum				
Nickel	183	203	11.2 (b)	0-10
Palladium				
Platinum				
Potassium				
Selenium	11.5	15.1	31.3 (a)	0-10
Silicon				
Silver	3.50	4.60	31.4 (a)	0-10
Sodium				
Strontium				
Thallium	0.00	0.00	NC	0-10
Tin				
Titanium				
Tungsten				
Vanadium	291	316	8.7	0-10
Zinc	1720	1950	13.3 (b)	0-10

Associated samples MP16325: M96199-1, M96199-2, M96199-3, M96199-4, M96199-5, M96199-6

SERIAL DILUTION RESULTS SUMMARY

Login Number: M96199
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16325
Matrix Type: SOLID

Methods: SW846 6010C
Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

(b) Serial dilution indicates possible matrix interference.

9.1.4

9

POST DIGESTATE SPIKE SUMMARY

Login Number: M96199
 Account: HALEYALD - Haley & Aldrich
 Project: Former Energy International Parcel, MA

QC Batch ID: MP16325
 Matrix Type: SOLID

Methods: SW846 6010C
 Units: ug/l

Prep Date:

12/01/10

Metal	Sample ml	Final ml	M96199-5 Raw	PS Corr.** ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum									
Antimony	9.9	10.1	27.9	27.34752	84.6	.1	5	49.50495	115.7 -
Arsenic									
Barium	9.9	10.1	2350	2303.465	5911	.1	470	4653.465	77.5 -
Beryllium									
Boron									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Gold									
Iron									
Lead									
Magnesium									
Manganese									
Molybdenum									
Nickel									
Palladium									
Platinum									
Potassium									
Selenium									
Silicon									
Silver									
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Tungsten									
Vanadium									
Zinc									

Associated samples MP16325: M96199-1, M96199-2, M96199-3, M96199-4, M96199-5, M96199-6

POST DIGESTATE SPIKE SUMMARY

Login Number: M96199
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16325
Matrix Type: SOLID

Methods: SW846 6010C
Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(**) Corr. sample result = Raw * (sample volume / final volume)
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M96199
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16331
Matrix Type: SOLID

Methods: SW846 7471A
Units: mg/kg

Prep Date: 12/03/10

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.033	.0047	.0055	0.011	<0.033

Associated samples MP16331: M96199-1, M96199-2, M96199-3, M96199-4, M96199-5, M96199-6

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M96199
 Account: HALEYALD - Haley & Aldrich
 Project: Former Energy International Parcel, MA

QC Batch ID: MP16331
 Matrix Type: SOLID

Methods: SW846 7471A
 Units: mg/kg

Prep Date: 12/03/10 12/03/10

Metal	M96199-5 Original	DUP	RPD	QC Limits	M96199-5 Original MS	Spikelot HGRWS1	% Rec	QC Limits
Mercury	0.53	0.65	20.3 (a)	0-20	0.53 1.2	0.518	129.3(b)	75-125

Associated samples MP16331: M96199-1, M96199-2, M96199-3, M96199-4, M96199-5, M96199-6

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) High RPD due to possible matrix interference and/or sample non-homogeneity.

(b) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.

9.2.2

9

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M96199
 Account: HALEYALD - Haley & Aldrich
 Project: Former Energy International Parcel, MA

QC Batch ID: MP16331
 Matrix Type: SOLID

Methods: SW846 7471A
 Units: mg/kg

Prep Date: 12/03/10 12/03/10

Metal	BSP Result	Spikelot HGRWS1	% Rec	QC Limits	BSD Result	Spikelot HGRWS1	% Rec	BSD RPD	QC Limit
Mercury	0.47	0.5	94.0	80-120	0.47	0.5	94.0	0.0	30

Associated samples MP16331: M96199-1, M96199-2, M96199-3, M96199-4, M96199-5, M96199-6

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M96199
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16331
Matrix Type: SOLID

Methods: SW846 7471A
Units: mg/kg

Prep Date: 12/03/10

Metal	LCS Result	Spikelot HGLCS69	% Rec	QC Limits
-------	---------------	---------------------	-------	--------------

Mercury 14.9 16.3 91.4 71-129

Associated samples MP16331: M96199-1, M96199-2, M96199-3, M96199-4, M96199-5, M96199-6

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M96199
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16354
Matrix Type: LEACHATE

Methods: SW846 6010C
Units: mg/l

Prep Date: 12/09/10

Metal	RL	IDL	MDL	MB raw	final
Aluminum	0.20	.015	.015		
Antimony	0.0060	.0009	.0012		
Arsenic	0.010	.001	.0019		
Barium	0.50	.00042	.0037		
Beryllium	0.0040	.00014	.0002		
Boron	0.10	.00033	.0015		
Cadmium	0.0040	.00011	.00012		
Calcium	5.0	.023	.039		
Chromium	0.010	.00047	.00053		
Cobalt	0.050	.00017	.00028		
Copper	0.025	.00086	.00086		
Gold	0.050	.0016	.0017		
Iron	0.10	.0039	.0041		
Lead	0.010	.0015	.0015	0.0013	<0.010
Magnesium	5.0	.037	.037		
Manganese	0.015	.00011	.0009		
Molybdenum	0.10	.00021	.00064		
Nickel	0.040	.00021	.0003		
Palladium	0.050	.0024	.0025		
Platinum	0.050	.0073	.0073		
Potassium	5.0	.029	.03		
Selenium	0.010	.0011	.0017		
Silicon	0.10	.0012	.0072		
Silver	0.0050	.0006	.0006		
Sodium	5.0	.015	.031		
Strontium	0.010	.00013	.00031		
Thallium	0.0050	.0007	.00074		
Tin	0.10	.00036	.00043		
Titanium	0.050	.00057	.00057		
Tungsten	0.10	.0048	.012		
Vanadium	0.010	.00073	.0011		
Zinc	0.10	.00024	.002		

Associated samples MP16354: M96199-1A, M96199-2A, M96199-3A, M96199-5A

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M96199
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16354
Matrix Type: LEACHATE

Methods: SW846 6010C
Units: mg/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M96199
 Account: HALEYALD - Haley & Aldrich
 Project: Former Energy International Parcel, MA

QC Batch ID: MP16354
 Matrix Type: LEACHATE

Methods: SW846 6010C
 Units: mg/l

Prep Date: 12/09/10 12/09/10

Metal	M96199-5A Original MS		Spikelot MPICP	% Rec	QC Limits	M96199-5A Original DUP		RPD	QC Limits
Aluminum									
Antimony									
Arsenic	anr								
Barium	anr								
Beryllium									
Boron									
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper									
Gold									
Iron									
Lead	0.56	1.5	1.0	94.0	75-125	0.56	0.56	0.0	0-20
Magnesium									
Manganese									
Molybdenum									
Nickel									
Palladium									
Platinum									
Potassium									
Selenium	anr								
Silicon									
Silver	anr								
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Tungsten									
Vanadium									
Zinc									

Associated samples MP16354: M96199-1A, M96199-2A, M96199-3A, M96199-5A

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M96199
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16354
Matrix Type: LEACHATE

Methods: SW846 6010C
Units: mg/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M96199
 Account: HALEYALD - Haley & Aldrich
 Project: Former Energy International Parcel, MA

QC Batch ID: MP16354
 Matrix Type: LEACHATE

Methods: SW846 6010C
 Units: mg/l

Prep Date: 12/09/10

Metal	M96289-4A Original LS	Spikelot MPICP	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic	anr			
Barium	anr			
Beryllium				
Boron				
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt				
Copper				
Gold				
Iron				
Lead	1.9	2.9	1.0	100.0
Magnesium				75-125
Manganese				
Molybdenum				
Nickel				
Palladium				
Platinum				
Potassium				
Selenium	anr			
Silicon				
Silver	anr			
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Tungsten				
Vanadium				
Zinc				

Associated samples MP16354: M96199-1A, M96199-2A, M96199-3A, M96199-5A

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M96199
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16354
Matrix Type: LEACHATE

Methods: SW846 6010C
Units: mg/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M96199
 Account: HALEYALD - Haley & Aldrich
 Project: Former Energy International Parcel, MA

QC Batch ID: MP16354
 Matrix Type: LEACHATE

Methods: SW846 6010C
 Units: mg/l

Prep Date: 12/09/10 12/09/10

Metal	BSP Result	Spikelot MPICP	% Rec	QC Limits	BSD Result	Spikelot MPICP	% Rec	BSD RPD	QC Limit
Aluminum									
Antimony									
Arsenic	anr								
Barium	anr								
Beryllium									
Boron									
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper									
Gold									
Iron									
Lead	0.91	1.0	91.0	80-120	0.91	1.0	91.0	0.0	20
Magnesium									
Manganese									
Molybdenum									
Nickel									
Palladium									
Platinum									
Potassium									
Selenium	anr								
Silicon									
Silver	anr								
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Tungsten									
Vanadium									
Zinc									

Associated samples MP16354: M96199-1A, M96199-2A, M96199-3A, M96199-5A

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M96199
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16354
Matrix Type: LEACHATE

Methods: SW846 6010C
Units: mg/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: M96199
 Account: HALEYALD - Haley & Aldrich
 Project: Former Energy International Parcel, MA

QC Batch ID: MP16354
 Matrix Type: LEACHATE

Methods: SW846 6010C
 Units: ug/l

Prep Date: 12/09/10

Metal	M96199-5A Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic	anr			
Barium	anr			
Beryllium				
Boron				
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt				
Copper				
Gold				
Iron				
Lead	555	576	3.6	0-10
Magnesium				
Manganese				
Molybdenum				
Nickel				
Palladium				
Platinum				
Potassium				
Selenium	anr			
Silicon				
Silver	anr			
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Tungsten				
Vanadium				
Zinc				

Associated samples MP16354: M96199-1A, M96199-2A, M96199-3A, M96199-5A

9.3.4
9

SERIAL DILUTION RESULTS SUMMARY

Login Number: M96199
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16354
Matrix Type: LEACHATE

Methods: SW846 6010C
Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

9.3.4

9

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: M96199
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Cyanide Reactivity	GP12374/GN33632	1.5	<1.5	mg/kg	250	31.4	12.6	-%
Sulfide Reactivity	GP12375/GN33633	50	<50	mg/kg	450	400	88.9	-%

Associated Samples:

Batch GP12374: M96199-1, M96199-2, M96199-3, M96199-4, M96199-5, M96199-6

Batch GP12375: M96199-1, M96199-2, M96199-3, M96199-4, M96199-5, M96199-6

(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: M96199
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Corrosivity as pH	GN33584	M96199-5		7.7	7.7	0.0	0-%
Cyanide Reactivity	GP12374/GN33632	M96225-8	mg/kg	<2.0	<2.0	0.0	0-20%
Ignitability (Flashpoint)	GN33600	M96199-5	Deg. F	>230	>230	0.0	0-20%
Redox Potential Vs H2	GN33623	M96199-6	mv	326	323(a)	0.9(a)	0-20%
Solids, Percent	GN33576	M96199-5	%	89.1	87	2.4	0-20%
Sulfide Reactivity	GP12375/GN33633	M96225-8	mg/kg	<68	<68	0.0	0-20%
pH	GN33588	M96199-5	su	7.7	7.7	0.0	0-20%

Associated Samples:

Batch GN33576: M96199-1, M96199-2, M96199-3, M96199-4, M96199-5, M96199-6
Batch GN33584: M96199-1, M96199-2, M96199-3, M96199-4, M96199-5, M96199-6
Batch GN33588: M96199-1, M96199-2, M96199-3, M96199-4, M96199-5, M96199-6
Batch GN33600: M96199-1, M96199-2, M96199-3, M96199-4, M96199-5, M96199-6
Batch GN33623: M96199-1, M96199-2, M96199-3, M96199-4, M96199-5, M96199-6
Batch GP12374: M96199-1, M96199-2, M96199-3, M96199-4, M96199-5, M96199-6
Batch GP12375: M96199-1, M96199-2, M96199-3, M96199-4, M96199-5, M96199-6
(*) Outside of QC limits
(a) Analysis requested after recommended holding time.

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: M96199
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Cyanide Reactivity	GP12374/GN33632	M96225-8	mg/kg	<2.0	341	41.3	12.1	-%
Sulfide Reactivity	GP12375/GN33633	M96225-8	mg/kg	<68	613	409	66.7	-%

Associated Samples:

Batch GP12374: M96199-1, M96199-2, M96199-3, M96199-4, M96199-5, M96199-6

Batch GP12375: M96199-1, M96199-2, M96199-3, M96199-4, M96199-5, M96199-6

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits



12/18/10

Technical Report for

Haley & Aldrich

Former Energy International Parcel, MA

06318-502

Accutest Job Number: M96200

Sampling Date: 11/29/10

Report to:

Haley & Aldrich

jkullmann@haleyaldrich.com

ATTN: Jane Kullmann

Total number of pages in report: **51**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Reza Pand
Reza Pand
Lab Director

Client Service contact: Kristen Blanchard 508-481-6200

Certifications: MA (M-MA136, SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) ME (MA00136) FL (E87579) NY (11791) NJ (MA926) PA (6801121) ND (R-188) CO MN (11546AA) NC (653) IL (002337) ISO 17025:2005 (L2235)

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Table of Contents

-1-

Section 1: Sample Summary	3
Section 2: Case Narrative/Conformance Summary	5
Section 3: Sample Results	7
3.1: M96200-1: HA112_0-2'	8
3.2: M96200-2: HA112_2-4'	9
3.3: M96200-4: HA112_6-8'	10
3.4: M96200-5: HA112_8-10'	11
3.5: M96200-6: HA112_10-12'	12
3.6: M96200-7: HA112_14-16.5'	13
3.7: M96200-8: HA112_16.5-18.0'	14
3.8: M96200-9: HA113_0-2'	15
3.9: M96200-10: HA112_12-14'	16
3.10: M96200-11: HA113_2-4'	17
3.11: M96200-13: HA113_6-8'	18
3.12: M96200-14: HA113_8-10'	19
3.13: M96200-15: HA113_10-12'	20
3.14: M96200-16: HA113_12-14'	21
3.15: M96200-17: HA113_14-15.5'	22
3.16: M96200-18: HA113_15.5-18.0'	23
3.17: M96200-19: HA111_0-2'	24
3.18: M96200-20: HA111_2-4'	25
3.19: M96200-22: HA111_6-8'	26
3.20: M96200-23: HA111_8-10'	27
3.21: M96200-24: HA111_10-12'	28
3.22: M96200-25: HA111_12-14'	29
3.23: M96200-26: HA111_14-16'	30
3.24: M96200-27: HA111_16-18'	31
Section 4: Misc. Forms	32
4.1: Certification Exceptions	33
4.2: Chain of Custody	34
4.3: MCP Form	38
4.4: Sample Tracking Chronicle	39
Section 5: GC Semi-volatiles - QC Data Summaries	43
5.1: Method Blank Summary	44
5.2: Blank Spike Summary	46
5.3: Blank Spike/Blank Spike Duplicate Summary	47
5.4: Matrix Spike/Matrix Spike Duplicate Summary	48
5.5: Surrogate Recovery Summaries	50

Sample Summary

Haley & Aldrich

Job No: M96200

Former Energy International Parcel, MA
Project No: 06318-502

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
M96200-1	11/29/10	08:00 MD	11/29/10	SO	Soil	HA112_0-2'
M96200-2	11/29/10	08:05 MD	11/29/10	SO	Soil	HA112_2-4'
M96200-4	11/29/10	08:50 MD	11/29/10	SO	Soil	HA112_6-8'
M96200-5	11/29/10	09:15 MD	11/29/10	SO	Soil	HA112_8-10'
M96200-6	11/29/10	09:20 MD	11/29/10	SO	Soil	HA112_10-12'
M96200-7	11/29/10	09:40 MD	11/29/10	SO	Soil	HA112_14-16.5'
M96200-8	11/29/10	09:55 MD	11/29/10	SO	Soil	HA112_16.5-18.0'
M96200-9	11/29/10	11:10 MD	11/29/10	SO	Soil	HA113_0-2'
M96200-10	11/29/10	09:35 MD	11/29/10	SO	Soil	HA112_12-14'
M96200-11	11/29/10	11:00 MD	11/29/10	SO	Soil	HA113_2-4'
M96200-13	11/29/10	11:20 MD	11/29/10	SO	Soil	HA113_6-8'
M96200-14	11/29/10	12:10 MD	11/29/10	SO	Soil	HA113_8-10'
M96200-15	11/29/10	12:00 MD	11/29/10	SO	Soil	HA113_10-12'

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary

(continued)

Haley & Aldrich

Job No: M96200

Former Energy International Parcel, MA

Project No: 06318-502

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
M96200-16	11/29/10	12:25 MD	11/29/10	SO	Soil	HA113_12-14'
M96200-17	11/29/10	12:20 MD	11/29/10	SO	Soil	HA113_14-15.5'
M96200-18	11/29/10	13:00 MD	11/29/10	SO	Soil	HA113_15.5-18.0'
M96200-19	11/29/10	13:40 MD	11/29/10	SO	Soil	HA111_0-2'
M96200-20	11/29/10	13:30 MD	11/29/10	SO	Soil	HA111_2-4'
M96200-22	11/29/10	14:10 MD	11/29/10	SO	Soil	HA111_6-8'
M96200-23	11/29/10	14:15 MD	11/29/10	SO	Soil	HA111_8-10'
M96200-24	11/29/10	14:20 MD	11/29/10	SO	Soil	HA111_10-12'
M96200-25	11/29/10	14:30 MD	11/29/10	SO	Soil	HA111_12-14'
M96200-26	11/29/10	14:40 MD	11/29/10	SO	Soil	HA111_14-16'
M96200-27	11/29/10	15:20 MD	11/29/10	SO	Soil	HA111_16-18'

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Haley & Aldrich

Job No M96200

Site: Former Energy International Parcel, MA

Report Date 12/18/2010 5:31:36 PM

24 Sample(s) were collected on 11/29/2010 and were received at Accutest on 11/29/2010 properly preserved, at 1.3 Deg. C and intact. These Samples received an Accutest job number of M96200. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Extractables by GC By Method SW846 8082

Matrix SO	Batch ID: OP23507
------------------	--------------------------

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M96200-5MS, M96200-5MSD were used as the QC samples indicated.
- M96200-5 for Decachlorobiphenyl: Outside control limits due to possible matrix interference.
- OP23507-MS/MSD for Decachlorobiphenyl: Outside control limits due to possible matrix interference.
- M96200-26 for Tetrachloro-m-xylene: Outside control limits due to possible matrix interference.
- M96200-14, M96200-16 for Aroclor 1260: Estimated value due to the presence of other Aroclor pattern.

Matrix SO	Batch ID: OP23621
------------------	--------------------------

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M96200-1MS, M96200-1MSD were used as the QC samples indicated.
- Sample(s) M96200-19 have compounds reported with "E" qualifiers indicating estimated value exceeding calibration range. Estimated value due to the presence of other Aroclor pattern.
- M96200-1, M96200-1, M96200-9, M96200-11, M96200-19, M96200-20, OP23621-MS, OP23621-MSD for Decachlorobiphenyl: Outside control limits due to possible matrix interference.
- M96200-9 for Aroclor 1260: Estimated value due to the presence of other Aroclor pattern.
- M96200-9, M96200-19 for Decachlorobiphenyl, Tetrachloro-m-xylene: Outside control limits due to dilution.
- M96200-19 for Aroclor 1254: Estimated value due to the presence of other Aroclor pattern.

Wet Chemistry By Method SM21 2540 B MOD.

Matrix SO	Batch ID: GN33577
------------------	--------------------------

- Sample(s) M96200-27DUP were used as the QC samples for Solids, Percent.

Matrix SO	Batch ID: GN33609
------------------	--------------------------

- Sample(s) M96200-13DUP were used as the QC samples for Solids, Percent.

Matrix SO	Batch ID: GN33702
------------------	--------------------------

- Sample(s) M96200-2DUP were used as the QC samples for Solids, Percent.

The Accutest Laboratories of New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety. The Accutest Laboratories of NE, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report(M96200).

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	HA112_0-2'	Date Sampled:	11/29/10
Lab Sample ID:	M96200-1	Date Received:	11/29/10
Matrix:	SO - Soil	Percent Solids:	90.9
Method:	SW846 8082 SW846 3540C		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ62994.D	1	12/15/10	CZ	12/13/10	OP23621	GYZ2675
Run #2							

Run #	Initial Weight	Final Volume
Run #1	15.3 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	110	ug/kg	
11104-28-2	Aroclor 1221	ND	110	ug/kg	
11141-16-5	Aroclor 1232	ND	110	ug/kg	
53469-21-9	Aroclor 1242	ND	110	ug/kg	
12672-29-6	Aroclor 1248	ND	110	ug/kg	
11097-69-1	Aroclor 1254	ND	110	ug/kg	
11096-82-5	Aroclor 1260	ND	110	ug/kg	
37324-23-5	Aroclor 1262	ND	110	ug/kg	
11100-14-4	Aroclor 1268	ND	110	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	89%		30-150%
877-09-8	Tetrachloro-m-xylene	77%		30-150%
2051-24-3	Decachlorobiphenyl	367% ^a		30-150%
2051-24-3	Decachlorobiphenyl	126%		30-150%

(a) Outside control limits due to possible matrix interference.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA112_2-4'	Date Sampled:	11/29/10
Lab Sample ID:	M96200-2	Date Received:	11/29/10
Matrix:	SO - Soil	Percent Solids:	91.5
Method:	SW846 8082 SW846 3540C		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ62995.D	1	12/15/10	CZ	12/13/10	OP23621	GYZ2675
Run #2							

Run #	Initial Weight	Final Volume
Run #1	15.9 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	100	ug/kg	
11104-28-2	Aroclor 1221	ND	100	ug/kg	
11141-16-5	Aroclor 1232	ND	100	ug/kg	
53469-21-9	Aroclor 1242	ND	100	ug/kg	
12672-29-6	Aroclor 1248	ND	100	ug/kg	
11097-69-1	Aroclor 1254	ND	100	ug/kg	
11096-82-5	Aroclor 1260	ND	100	ug/kg	
37324-23-5	Aroclor 1262	ND	100	ug/kg	
11100-14-4	Aroclor 1268	ND	100	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	77%		30-150%
877-09-8	Tetrachloro-m-xylene	77%		30-150%
2051-24-3	Decachlorobiphenyl	734% ^a		30-150%
2051-24-3	Decachlorobiphenyl	79%		30-150%

(a) Outside control limits due to possible matrix interference.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA112_6-8'	Date Sampled:	11/29/10
Lab Sample ID:	M96200-4	Date Received:	11/29/10
Matrix:	SO - Soil	Percent Solids:	82.8
Method:	SW846 8082 SW846 3540C		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE22753.D	1	12/06/10	AP	12/02/10	OP23507	GBE1365
Run #2							

Run #	Initial Weight	Final Volume
Run #1	15.9 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	110	ug/kg	
11104-28-2	Aroclor 1221	ND	110	ug/kg	
11141-16-5	Aroclor 1232	ND	110	ug/kg	
53469-21-9	Aroclor 1242	ND	110	ug/kg	
12672-29-6	Aroclor 1248	ND	110	ug/kg	
11097-69-1	Aroclor 1254	ND	110	ug/kg	
11096-82-5	Aroclor 1260	ND	110	ug/kg	
37324-23-5	Aroclor 1262	ND	110	ug/kg	
11100-14-4	Aroclor 1268	ND	110	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	99%		30-150%
877-09-8	Tetrachloro-m-xylene	68%		30-150%
2051-24-3	Decachlorobiphenyl	94%		30-150%
2051-24-3	Decachlorobiphenyl	114%		30-150%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA112_8-10'	Date Sampled:	11/29/10
Lab Sample ID:	M96200-5	Date Received:	11/29/10
Matrix:	SO - Soil	Percent Solids:	85.3
Method:	SW846 8082 SW846 3540C		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE22788.D	1	12/06/10	AP	12/02/10	OP23507	GBE1365
Run #2							

	Initial Weight	Final Volume
Run #1	15.4 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	110	ug/kg	
11104-28-2	Aroclor 1221	ND	110	ug/kg	
11141-16-5	Aroclor 1232	ND	110	ug/kg	
53469-21-9	Aroclor 1242	ND	110	ug/kg	
12672-29-6	Aroclor 1248	ND	110	ug/kg	
11097-69-1	Aroclor 1254	ND	110	ug/kg	
11096-82-5	Aroclor 1260	ND	110	ug/kg	
37324-23-5	Aroclor 1262	ND	110	ug/kg	
11100-14-4	Aroclor 1268	ND	110	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	99%		30-150%
877-09-8	Tetrachloro-m-xylene	95%		30-150%
2051-24-3	Decachlorobiphenyl	87%		30-150%
2051-24-3	Decachlorobiphenyl	254% ^a		30-150%

(a) Outside control limits due to possible matrix interference.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA112_10-12'		
Lab Sample ID:	M96200-6	Date Sampled:	11/29/10
Matrix:	SO - Soil	Date Received:	11/29/10
Method:	SW846 8082 SW846 3540C	Percent Solids:	70.9
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE22736.D	1	12/05/10	AP	12/02/10	OP23507	GBE1365
Run #2							

	Initial Weight	Final Volume
Run #1	15.7 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	130	ug/kg	
11104-28-2	Aroclor 1221	ND	130	ug/kg	
11141-16-5	Aroclor 1232	ND	130	ug/kg	
53469-21-9	Aroclor 1242	ND	130	ug/kg	
12672-29-6	Aroclor 1248	ND	130	ug/kg	
11097-69-1	Aroclor 1254	ND	130	ug/kg	
11096-82-5	Aroclor 1260	ND	130	ug/kg	
37324-23-5	Aroclor 1262	ND	130	ug/kg	
11100-14-4	Aroclor 1268	ND	130	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	89%		30-150%
877-09-8	Tetrachloro-m-xylene	112%		30-150%
2051-24-3	Decachlorobiphenyl	86%		30-150%
2051-24-3	Decachlorobiphenyl	108%		30-150%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA112_14-16.5'

Lab Sample ID: M96200-7

Date Sampled: 11/29/10

Matrix: SO - Soil

Date Received: 11/29/10

Method: SW846 8082 SW846 3540C

Percent Solids: 79.4

Project: Former Energy International Parcel, MA

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE22785.D	1	12/06/10	AP	12/02/10	OP23507	GBE1365
Run #2							

	Initial Weight	Final Volume
Run #1	15.9 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	120	ug/kg	
11104-28-2	Aroclor 1221	ND	120	ug/kg	
11141-16-5	Aroclor 1232	ND	120	ug/kg	
53469-21-9	Aroclor 1242	ND	120	ug/kg	
12672-29-6	Aroclor 1248	ND	120	ug/kg	
11097-69-1	Aroclor 1254	ND	120	ug/kg	
11096-82-5	Aroclor 1260	ND	120	ug/kg	
37324-23-5	Aroclor 1262	ND	120	ug/kg	
11100-14-4	Aroclor 1268	ND	120	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	112%		30-150%
877-09-8	Tetrachloro-m-xylene	119%		30-150%
2051-24-3	Decachlorobiphenyl	98%		30-150%
2051-24-3	Decachlorobiphenyl	115%		30-150%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA112_16.5-18.0'	Date Sampled:	11/29/10
Lab Sample ID:	M96200-8	Date Received:	11/29/10
Matrix:	SO - Soil	Percent Solids:	63.2
Method:	SW846 8082 SW846 3540C		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE22737.D	1	12/05/10	AP	12/02/10	OP23507	GBE1365
Run #2							

	Initial Weight	Final Volume
Run #1	15.4 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	150	ug/kg	
11104-28-2	Aroclor 1221	ND	150	ug/kg	
11141-16-5	Aroclor 1232	ND	150	ug/kg	
53469-21-9	Aroclor 1242	ND	150	ug/kg	
12672-29-6	Aroclor 1248	ND	150	ug/kg	
11097-69-1	Aroclor 1254	ND	150	ug/kg	
11096-82-5	Aroclor 1260	ND	150	ug/kg	
37324-23-5	Aroclor 1262	ND	150	ug/kg	
11100-14-4	Aroclor 1268	ND	150	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	104%		30-150%
877-09-8	Tetrachloro-m-xylene	103%		30-150%
2051-24-3	Decachlorobiphenyl	107%		30-150%
2051-24-3	Decachlorobiphenyl	109%		30-150%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA113_0-2'	Date Sampled:	11/29/10
Lab Sample ID:	M96200-9	Date Received:	11/29/10
Matrix:	SO - Soil	Percent Solids:	80.9
Method:	SW846 8082 SW846 3540C		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ62996.D	1	12/15/10	CZ	12/13/10	OP23621	GYZ2675
Run #2	YZ63041.D	100	12/16/10	CZ	12/13/10	OP23621	GYZ2676

	Initial Weight	Final Volume
Run #1	15.6 g	10.0 ml
Run #2	15.6 g	10.0 ml

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	120	ug/kg	
11104-28-2	Aroclor 1221	ND	120	ug/kg	
11141-16-5	Aroclor 1232	ND	120	ug/kg	
53469-21-9	Aroclor 1242	ND	120	ug/kg	
12672-29-6	Aroclor 1248	ND	120	ug/kg	
11097-69-1	Aroclor 1254	33700 ^a	12000	ug/kg	
11096-82-5	Aroclor 1260 ^b	13100 ^a	12000	ug/kg	
37324-23-5	Aroclor 1262	ND	120	ug/kg	
11100-14-4	Aroclor 1268	ND	120	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	80%	0% ^c	30-150%
877-09-8	Tetrachloro-m-xylene	83%	0% ^c	30-150%
2051-24-3	Decachlorobiphenyl	326% ^d	0% ^c	30-150%
2051-24-3	Decachlorobiphenyl	175% ^d	0% ^c	30-150%

(a) Result is from Run# 2

(b) Estimated value due to the presence of other Aroclor pattern.

(c) Outside control limits due to dilution.

(d) Outside control limits due to possible matrix interference.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA112_12-14'		
Lab Sample ID:	M96200-10	Date Sampled:	11/29/10
Matrix:	SO - Soil	Date Received:	11/29/10
Method:	SW846 8082 SW846 3540C	Percent Solids:	79.8
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE22738.D	1	12/05/10	AP	12/02/10	OP23507	GBE1365
Run #2							

	Initial Weight	Final Volume
Run #1	15.4 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	120	ug/kg	
11104-28-2	Aroclor 1221	ND	120	ug/kg	
11141-16-5	Aroclor 1232	ND	120	ug/kg	
53469-21-9	Aroclor 1242	ND	120	ug/kg	
12672-29-6	Aroclor 1248	ND	120	ug/kg	
11097-69-1	Aroclor 1254	ND	120	ug/kg	
11096-82-5	Aroclor 1260	ND	120	ug/kg	
37324-23-5	Aroclor 1262	ND	120	ug/kg	
11100-14-4	Aroclor 1268	ND	120	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	128%		30-150%
877-09-8	Tetrachloro-m-xylene	115%		30-150%
2051-24-3	Decachlorobiphenyl	112%		30-150%
2051-24-3	Decachlorobiphenyl	104%		30-150%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA113_2-4'	Date Sampled:	11/29/10
Lab Sample ID:	M96200-11	Date Received:	11/29/10
Matrix:	SO - Soil	Percent Solids:	86.7
Method:	SW846 8082 SW846 3540C		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ62997.D	1	12/15/10	CZ	12/13/10	OP23621	GYZ2675
Run #2							

Run #	Initial Weight	Final Volume
Run #1	15.5 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	110	ug/kg	
11104-28-2	Aroclor 1221	ND	110	ug/kg	
11141-16-5	Aroclor 1232	ND	110	ug/kg	
53469-21-9	Aroclor 1242	ND	110	ug/kg	
12672-29-6	Aroclor 1248	ND	110	ug/kg	
11097-69-1	Aroclor 1254	ND	110	ug/kg	
11096-82-5	Aroclor 1260	ND	110	ug/kg	
37324-23-5	Aroclor 1262	ND	110	ug/kg	
11100-14-4	Aroclor 1268	ND	110	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	83%		30-150%
877-09-8	Tetrachloro-m-xylene	78%		30-150%
2051-24-3	Decachlorobiphenyl	184% ^a		30-150%
2051-24-3	Decachlorobiphenyl	77%		30-150%

(a) Outside control limits due to possible matrix interference.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA113_6-8'	Date Sampled:	11/29/10
Lab Sample ID:	M96200-13	Date Received:	11/29/10
Matrix:	SO - Soil	Percent Solids:	81.0
Method:	SW846 8082 SW846 3540C		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE22754.D	1	12/06/10	AP	12/02/10	OP23507	GBE1365
Run #2							

	Initial Weight	Final Volume
Run #1	15.2 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	120	ug/kg	
11104-28-2	Aroclor 1221	ND	120	ug/kg	
11141-16-5	Aroclor 1232	ND	120	ug/kg	
53469-21-9	Aroclor 1242	ND	120	ug/kg	
12672-29-6	Aroclor 1248	ND	120	ug/kg	
11097-69-1	Aroclor 1254	ND	120	ug/kg	
11096-82-5	Aroclor 1260	ND	120	ug/kg	
37324-23-5	Aroclor 1262	ND	120	ug/kg	
11100-14-4	Aroclor 1268	ND	120	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	90%		30-150%
877-09-8	Tetrachloro-m-xylene	104%		30-150%
2051-24-3	Decachlorobiphenyl	91%		30-150%
2051-24-3	Decachlorobiphenyl	97%		30-150%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA113_8-10'		
Lab Sample ID:	M96200-14	Date Sampled:	11/29/10
Matrix:	SO - Soil	Date Received:	11/29/10
Method:	SW846 8082 SW846 3540C	Percent Solids:	73.5
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE22741.D	1	12/05/10	AP	12/02/10	OP23507	GBE1365
Run #2							

	Initial Weight	Final Volume
Run #1	15.2 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	130	ug/kg	
11104-28-2	Aroclor 1221	ND	130	ug/kg	
11141-16-5	Aroclor 1232	ND	130	ug/kg	
53469-21-9	Aroclor 1242	ND	130	ug/kg	
12672-29-6	Aroclor 1248	ND	130	ug/kg	
11097-69-1	Aroclor 1254	396	130	ug/kg	
11096-82-5	Aroclor 1260 ^a	285	130	ug/kg	
37324-23-5	Aroclor 1262	ND	130	ug/kg	
11100-14-4	Aroclor 1268	ND	130	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	133%		30-150%
877-09-8	Tetrachloro-m-xylene	132%		30-150%
2051-24-3	Decachlorobiphenyl	116%		30-150%
2051-24-3	Decachlorobiphenyl	122%		30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA113_10-12'						
Lab Sample ID:	M96200-15			Date Sampled:	11/29/10		
Matrix:	SO - Soil			Date Received:	11/29/10		
Method:	SW846 8082 SW846 3540C			Percent Solids:	73.8		
Project:	Former Energy International Parcel, MA						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE22739.D	1	12/05/10	AP	12/02/10	OP23507	GBE1365
Run #2							

	Initial Weight	Final Volume
Run #1	15.1 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	130	ug/kg	
11104-28-2	Aroclor 1221	ND	130	ug/kg	
11141-16-5	Aroclor 1232	ND	130	ug/kg	
53469-21-9	Aroclor 1242	ND	130	ug/kg	
12672-29-6	Aroclor 1248	ND	130	ug/kg	
11097-69-1	Aroclor 1254	ND	130	ug/kg	
11096-82-5	Aroclor 1260	ND	130	ug/kg	
37324-23-5	Aroclor 1262	ND	130	ug/kg	
11100-14-4	Aroclor 1268	ND	130	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	97%		30-150%
877-09-8	Tetrachloro-m-xylene	93%		30-150%
2051-24-3	Decachlorobiphenyl	86%		30-150%
2051-24-3	Decachlorobiphenyl	84%		30-150%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA113_12-14'	Date Sampled:	11/29/10
Lab Sample ID:	M96200-16	Date Received:	11/29/10
Matrix:	SO - Soil	Percent Solids:	76.8
Method:	SW846 8082 SW846 3540C		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE22742.D	1	12/05/10	AP	12/02/10	OP23507	GBE1365
Run #2							

Run #	Initial Weight	Final Volume
Run #1	15.5 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	130	ug/kg	
11104-28-2	Aroclor 1221	ND	130	ug/kg	
11141-16-5	Aroclor 1232	ND	130	ug/kg	
53469-21-9	Aroclor 1242	ND	130	ug/kg	
12672-29-6	Aroclor 1248	ND	130	ug/kg	
11097-69-1	Aroclor 1254	643	130	ug/kg	
11096-82-5	Aroclor 1260 ^a	246	130	ug/kg	
37324-23-5	Aroclor 1262	ND	130	ug/kg	
11100-14-4	Aroclor 1268	ND	130	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	132%		30-150%
877-09-8	Tetrachloro-m-xylene	107%		30-150%
2051-24-3	Decachlorobiphenyl	105%		30-150%
2051-24-3	Decachlorobiphenyl	127%		30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA113_14-15.5'	Date Sampled:	11/29/10
Lab Sample ID:	M96200-17	Date Received:	11/29/10
Matrix:	SO - Soil	Percent Solids:	76.8
Method:	SW846 8082 SW846 3540C		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE22743.D	1	12/05/10	AP	12/02/10	OP23507	GBE1365
Run #2							

Run #	Initial Weight	Final Volume
Run #1	15.5 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	130	ug/kg	
11104-28-2	Aroclor 1221	ND	130	ug/kg	
11141-16-5	Aroclor 1232	ND	130	ug/kg	
53469-21-9	Aroclor 1242	ND	130	ug/kg	
12672-29-6	Aroclor 1248	ND	130	ug/kg	
11097-69-1	Aroclor 1254	ND	130	ug/kg	
11096-82-5	Aroclor 1260	ND	130	ug/kg	
37324-23-5	Aroclor 1262	ND	130	ug/kg	
11100-14-4	Aroclor 1268	ND	130	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	124%		30-150%
877-09-8	Tetrachloro-m-xylene	112%		30-150%
2051-24-3	Decachlorobiphenyl	97%		30-150%
2051-24-3	Decachlorobiphenyl	110%		30-150%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA113_15.5-18.0'			Date Sampled:	11/29/10
Lab Sample ID:	M96200-18			Date Received:	11/29/10
Matrix:	SO - Soil			Percent Solids:	60.6
Method:	SW846 8082 SW846 3540C				
Project:	Former Energy International Parcel, MA				

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE22744.D	1	12/05/10	AP	12/02/10	OP23507	GBE1365
Run #2							

	Initial Weight	Final Volume
Run #1	15.7 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	160	ug/kg	
11104-28-2	Aroclor 1221	ND	160	ug/kg	
11141-16-5	Aroclor 1232	ND	160	ug/kg	
53469-21-9	Aroclor 1242	ND	160	ug/kg	
12672-29-6	Aroclor 1248	ND	160	ug/kg	
11097-69-1	Aroclor 1254	ND	160	ug/kg	
11096-82-5	Aroclor 1260	ND	160	ug/kg	
37324-23-5	Aroclor 1262	ND	160	ug/kg	
11100-14-4	Aroclor 1268	ND	160	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	111%		30-150%
877-09-8	Tetrachloro-m-xylene	114%		30-150%
2051-24-3	Decachlorobiphenyl	109%		30-150%
2051-24-3	Decachlorobiphenyl	146%		30-150%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA111_0-2'	Date Sampled:	11/29/10
Lab Sample ID:	M96200-19	Date Received:	11/29/10
Matrix:	SO - Soil	Percent Solids:	87.7
Method:	SW846 8082 SW846 3540C		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ63075.D	1	12/16/10	CZ	12/13/10	OP23621	GYZ2677
Run #2	YZ63042.D	20	12/16/10	CZ	12/13/10	OP23621	GYZ2676

	Initial Weight	Final Volume
Run #1	15.4 g	10.0 ml
Run #2	15.4 g	10.0 ml

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	110	ug/kg	
11104-28-2	Aroclor 1221	ND	110	ug/kg	
11141-16-5	Aroclor 1232	ND	110	ug/kg	
53469-21-9	Aroclor 1242	ND	110	ug/kg	
12672-29-6	Aroclor 1248 ^a	1140	110	ug/kg	E
11097-69-1	Aroclor 1254 ^a	4470 ^b	2200	ug/kg	
11096-82-5	Aroclor 1260	6020 ^b	2200	ug/kg	
37324-23-5	Aroclor 1262	ND	110	ug/kg	
11100-14-4	Aroclor 1268	ND	110	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	93%	0% ^c	30-150%
877-09-8	Tetrachloro-m-xylene	118%	0% ^c	30-150%
2051-24-3	Decachlorobiphenyl	245% ^d	0% ^c	30-150%
2051-24-3	Decachlorobiphenyl	136%	0% ^c	30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

(b) Result is from Run# 2

(c) Outside control limits due to dilution.

(d) Outside control limits due to possible matrix interference.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA111_2-4'	Date Sampled:	11/29/10
Lab Sample ID:	M96200-20	Date Received:	11/29/10
Matrix:	SO - Soil	Percent Solids:	85.8
Method:	SW846 8082 SW846 3540C		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ63077.D	1	12/16/10	CZ	12/13/10	OP23621	GYZ2677
Run #2							

	Initial Weight	Final Volume
Run #1	15.1 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	120	ug/kg	
11104-28-2	Aroclor 1221	ND	120	ug/kg	
11141-16-5	Aroclor 1232	ND	120	ug/kg	
53469-21-9	Aroclor 1242	ND	120	ug/kg	
12672-29-6	Aroclor 1248	ND	120	ug/kg	
11097-69-1	Aroclor 1254	ND	120	ug/kg	
11096-82-5	Aroclor 1260	ND	120	ug/kg	
37324-23-5	Aroclor 1262	ND	120	ug/kg	
11100-14-4	Aroclor 1268	ND	120	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	93%		30-150%
877-09-8	Tetrachloro-m-xylene	89%		30-150%
2051-24-3	Decachlorobiphenyl	162% ^a		30-150%
2051-24-3	Decachlorobiphenyl	139%		30-150%

(a) Outside control limits due to possible matrix interference.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA111_6-8'	Date Sampled:	11/29/10
Lab Sample ID:	M96200-22	Date Received:	11/29/10
Matrix:	SO - Soil	Percent Solids:	70.2
Method:	SW846 8082 SW846 3540C		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE22755.D	1	12/06/10	AP	12/02/10	OP23507	GBE1365
Run #2							

Run #	Initial Weight	Final Volume
Run #1	15.4 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	140	ug/kg	
11104-28-2	Aroclor 1221	ND	140	ug/kg	
11141-16-5	Aroclor 1232	ND	140	ug/kg	
53469-21-9	Aroclor 1242	ND	140	ug/kg	
12672-29-6	Aroclor 1248	ND	140	ug/kg	
11097-69-1	Aroclor 1254	ND	140	ug/kg	
11096-82-5	Aroclor 1260	ND	140	ug/kg	
37324-23-5	Aroclor 1262	ND	140	ug/kg	
11100-14-4	Aroclor 1268	ND	140	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	102%		30-150%
877-09-8	Tetrachloro-m-xylene	102%		30-150%
2051-24-3	Decachlorobiphenyl	92%		30-150%
2051-24-3	Decachlorobiphenyl	94%		30-150%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA111_8-10'	Date Sampled:	11/29/10
Lab Sample ID:	M96200-23	Date Received:	11/29/10
Matrix:	SO - Soil	Percent Solids:	63.9
Method:	SW846 8082 SW846 3540C		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE22745.D	1	12/05/10	AP	12/02/10	OP23507	GBE1365
Run #2							

Run #	Initial Weight	Final Volume
Run #1	15.7 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	150	ug/kg	
11104-28-2	Aroclor 1221	ND	150	ug/kg	
11141-16-5	Aroclor 1232	ND	150	ug/kg	
53469-21-9	Aroclor 1242	ND	150	ug/kg	
12672-29-6	Aroclor 1248	ND	150	ug/kg	
11097-69-1	Aroclor 1254	ND	150	ug/kg	
11096-82-5	Aroclor 1260	ND	150	ug/kg	
37324-23-5	Aroclor 1262	ND	150	ug/kg	
11100-14-4	Aroclor 1268	ND	150	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	134%		30-150%
877-09-8	Tetrachloro-m-xylene	135%		30-150%
2051-24-3	Decachlorobiphenyl	114%		30-150%
2051-24-3	Decachlorobiphenyl	138%		30-150%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA111_10-12'		
Lab Sample ID:	M96200-24	Date Sampled:	11/29/10
Matrix:	SO - Soil	Date Received:	11/29/10
Method:	SW846 8082 SW846 3540C	Percent Solids:	63.0
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE22746.D	1	12/05/10	AP	12/02/10	OP23507	GBE1365
Run #2							

	Initial Weight	Final Volume
Run #1	15.3 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	160	ug/kg	
11104-28-2	Aroclor 1221	ND	160	ug/kg	
11141-16-5	Aroclor 1232	ND	160	ug/kg	
53469-21-9	Aroclor 1242	ND	160	ug/kg	
12672-29-6	Aroclor 1248	ND	160	ug/kg	
11097-69-1	Aroclor 1254	ND	160	ug/kg	
11096-82-5	Aroclor 1260	ND	160	ug/kg	
37324-23-5	Aroclor 1262	ND	160	ug/kg	
11100-14-4	Aroclor 1268	ND	160	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	93%		30-150%
877-09-8	Tetrachloro-m-xylene	94%		30-150%
2051-24-3	Decachlorobiphenyl	83%		30-150%
2051-24-3	Decachlorobiphenyl	96%		30-150%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA111_12-14'	Date Sampled:	11/29/10
Lab Sample ID:	M96200-25	Date Received:	11/29/10
Matrix:	SO - Soil	Percent Solids:	71.6
Method:	SW846 8082 SW846 3540C		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE22747.D	1	12/05/10	AP	12/02/10	OP23507	GBE1365
Run #2							

	Initial Weight	Final Volume
Run #1	15.4 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	140	ug/kg	
11104-28-2	Aroclor 1221	ND	140	ug/kg	
11141-16-5	Aroclor 1232	ND	140	ug/kg	
53469-21-9	Aroclor 1242	ND	140	ug/kg	
12672-29-6	Aroclor 1248	ND	140	ug/kg	
11097-69-1	Aroclor 1254	ND	140	ug/kg	
11096-82-5	Aroclor 1260	ND	140	ug/kg	
37324-23-5	Aroclor 1262	ND	140	ug/kg	
11100-14-4	Aroclor 1268	ND	140	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	109%		30-150%
877-09-8	Tetrachloro-m-xylene	102%		30-150%
2051-24-3	Decachlorobiphenyl	96%		30-150%
2051-24-3	Decachlorobiphenyl	102%		30-150%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA111_14-16'	Date Sampled:	11/29/10
Lab Sample ID:	M96200-26	Date Received:	11/29/10
Matrix:	SO - Soil	Percent Solids:	61.7
Method:	SW846 8082 SW846 3540C		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE22748.D	1	12/05/10	AP	12/02/10	OP23507	GBE1365
Run #2							

Run #	Initial Weight	Final Volume
Run #1	15.1 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	160	ug/kg	
11104-28-2	Aroclor 1221	ND	160	ug/kg	
11141-16-5	Aroclor 1232	ND	160	ug/kg	
53469-21-9	Aroclor 1242	ND	160	ug/kg	
12672-29-6	Aroclor 1248	ND	160	ug/kg	
11097-69-1	Aroclor 1254	ND	160	ug/kg	
11096-82-5	Aroclor 1260	ND	160	ug/kg	
37324-23-5	Aroclor 1262	ND	160	ug/kg	
11100-14-4	Aroclor 1268	ND	160	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	376% ^a		30-150%
877-09-8	Tetrachloro-m-xylene	81%		30-150%
2051-24-3	Decachlorobiphenyl	90%		30-150%
2051-24-3	Decachlorobiphenyl	104%		30-150%

(a) Outside control limits due to possible matrix interference.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA111_16-18'	Date Sampled:	11/29/10
Lab Sample ID:	M96200-27	Date Received:	11/29/10
Matrix:	SO - Soil	Percent Solids:	60.2
Method:	SW846 8082 SW846 3540C		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE22749.D	1	12/06/10	AP	12/02/10	OP23507	GBE1365
Run #2							

	Initial Weight	Final Volume
Run #1	15.1 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	160	ug/kg	
11104-28-2	Aroclor 1221	ND	160	ug/kg	
11141-16-5	Aroclor 1232	ND	160	ug/kg	
53469-21-9	Aroclor 1242	ND	160	ug/kg	
12672-29-6	Aroclor 1248	ND	160	ug/kg	
11097-69-1	Aroclor 1254	ND	160	ug/kg	
11096-82-5	Aroclor 1260	ND	160	ug/kg	
37324-23-5	Aroclor 1262	ND	160	ug/kg	
11100-14-4	Aroclor 1268	ND	160	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	118%		30-150%
877-09-8	Tetrachloro-m-xylene	107%		30-150%
2051-24-3	Decachlorobiphenyl	104%		30-150%
2051-24-3	Decachlorobiphenyl	94%		30-150%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Parameter Certifications (MA)
- Chain of Custody
- MCP Form
- Sample Tracking Chronicle

Parameter Certification Exceptions

Job Number: M96200
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

The following parameters included in this report are exceptions to NELAC certification.
The certification status of each is indicated below.

Parameter	CAS#	Method	Mat	Certification Status
Aroclor 1262	37324-23-5	SW846 8082	SO	Certified by SOP MGC204/GC-ECD
Aroclor 1268	11100-14-4	SW846 8082	SO	Certified by SOP MGC204/GC-ECD

4.1
4

M9620C

Page 1 of 2

H&A FILE NO.	06318-502
PROJECT NAME	Former Energy International Parcel
H&A CONTACT	J. Kullman

LABORATORY Acetest
ADDRESS Marlborough, MA
CONTACT K. Gibbons

DELIVERY DATE	11/29/10
TURNAROUND TIME	10 - Days
PROJECT MANAGER	C. Worth

Sample No.				Date	Time	Depth	Type	Analysis Requested													Number of Containers	Comments (special instructions, precautions, additional method numbers, etc.)			
								VOA	ABRS	PAA only	MCP Metals	Residual Cyanide	Other Metals	Full State	Change only	TPH (specify)	TCLP (specify)	Reactivity	Other	Commodity					
HA112-0-2'-1	11/29/10	0800	0-2'	Soil																					Laboratory to use applicable DEP CAM methods, unless otherwise directed. ① PCBs
HA112-2-4'-2		0805	2-4'																						
HA112-4-6'-3		0855	4-6'																						
HA112-6-8'-4		0850	6-8'																						
HA112-8-10'-5		0915	8-10'																						
HA112-10-12'-6		0920	10-12'																						
HA112-14-16.5'-7		0940	14-16.5'																						
HA112-16.5-18.0'-8		0955	16.5-18.0'																						
HA113-0-2'-9		1110	0-2'																						
HA112-12-14'-10		0935	12-14'																						
Sampled and Relinquished by		Received by		LIQUID													Sampling Comments								
Sign <i>Wayne Morin</i>		Sign <i>Wayne Morin</i>															VOA Vial								
Print <i>Wayne Morin</i>		Print <i>Wayne Morin</i>															Amber Glass								
Firm <i>HA</i>		Firm															Plastic Bottle								
Date <i>11/29/10</i> Time <i>1615</i>		Date <i>11-29-10</i> Time <i>1615</i>															Preservative								
																	Volume								
Relinquished by		Received by		SOLID																					
Sign <i>Wayne Morin</i>		Sign <i>Wayne Morin</i>															VOA Vial								
Print <i>Wayne Morin</i>		Print <i>Wayne Morin</i>															Amber Glass								
Firm <i>HA</i>		Firm															Clear Glass								
Date <i>11-29-10</i> Time		Date <i>11-29-10</i> Time <i>1715</i>															Preservative								
																	Volume								
Relinquished by		Received by															Evidence samples were tampered with? YES NO								
																	If YES, please explain in section below.								
				PRESERVATION KEY																					
				A Sample chilled C NaOH E H ₂ SO ₄ G Methanol																					
				B Sample filtered D HNO ₃ F HCL H Water/NaHSO ₄ (circle)																					
If Presumptive Certainty Data Package is needed, initial all sections:																	Required Reporting Limits and Data Quality Objectives								
<input checked="" type="checkbox"/> The required minimum field QC samples, as designated in BWSCAM-VII have been or will be collected, to meet the requirements of Presumptive Certainty. Matrix Spike (MS) samples for MCP Metals and/or Cyanide are included and identified herein. This Chain of Custody Record (specify) <input checked="" type="checkbox"/> includes <input checked="" type="checkbox"/> does not include samples defined as Drinking Water Samples. If this Chain of Custody Record identifies samples defined as Drinking Water Samples, Trip Blanks and Field Duplicates are included and identified and analysis of TICs are required, as appropriate. Laboratory should (specify if applicable) <u> </u> analyz																	<input checked="" type="checkbox"/> RC-S1 <input type="checkbox"/> S1 <input type="checkbox"/> GW1 <input type="checkbox"/> RC-S2 <input type="checkbox"/> S2 <input type="checkbox"/> GW2 <input type="checkbox"/> RC-GW1 <input type="checkbox"/> S3 <input type="checkbox"/> GW3 <input type="checkbox"/> RC-GW2								

H&A FILE NO.	06318-502
PROJECT NAME	Former Energy International Parcel
H&A CONTACT	T. Killman

LABORATORY Accutest
ADDRESS Marlborough, MA
CONTACT K. Gibbons

DELIVERY DATE	11/29/10
TURNAROUND TIME	10 Day
PROJECT MANAGER	C. Worthen

						ANALYSIS REQUESTED																
Sample No.	Date	Time	Depth (ft)	Type		VOA	ABHS PAH only	MCP Metals	Pesticides (circle)	THP	Cyanide only	Full State PAH Suite	Changed only	TPE (specify)	TCLP (specify)	Reactivity Screening	Density				Number of Containers	Comments (special instructions, precautions, additional method numbers, etc.)
HA113-2-4'-11	1/29/10		1100	2-4	Soil			X	X												1	Laboratory to use applicable DEP CAM methods, unless otherwise directed. ① PCBs
HA113-4-6'-12			1125	4-6				X	X												1	
HA113-6-8'-13			1120	6-8				X	X												1	
HA113-8-10'-14			1210	8-10				X	X												1	
HA113-10-12'-15			1200	10-12				X	X												1	
HA113-12-14'-16			1235	12-14				X	X												1	
HA113-14-15.5'-17			1220	14-15.5'				X	X												1	
HA113-15.5-18.0'-18			1300	15.5-18.0'				X	X												1	
HA111-0-2'-19			1340	0-2				X	X												1	
HA111-2-4'-20			1330	2-4				X	X												1	
Sampled and Relinquished by					Received by	LIQUID C10 TOTAL															Sampling Comments	
Sign <i>[Signature]</i>	Sign <i>Wayne Morris</i>																VOA Vial					
Print <i>Matthew Dedson</i>	Print <i>WAYNE MORRIS</i>																Amber Glass					
Firm <i>HFA</i>	Firm																Plastic Bottle					
Date <i>1/29/10</i> Time <i>1615</i>	Date <i>1-29-10</i> Time <i>1615</i>																Preservative					
Relinquished by					Received by	SOLID															Evidence samples were tampered with? YES NO	
Sign <i>Wayne Morris</i>	Sign <i>Wayne Morris</i>																Volume					
Print <i>WAYNE MORRIS</i>	Print <i>WAYNE MORRIS</i>																VOA Vial					
Firm	Firm																Amber Glass					
Date <i>1-29-10</i> Time	Date <i>1-29-10</i> Time <i>1715</i>																Clear Glass					
Relinquished by					Received by																Preservative	
Sign	Sign																Volume					
Print	Print																					
Firm	Firm																					
Date	Date																					
<p align="center">PRESERVATION KEY</p> <p>A Sample chilled C NaOH E H₂SO₄ G Methanol</p> <p>B Sample filtered D HNO₃ F HCL H Water/NaHSO₄ (circle)</p>																						
<p align="center">Presumptive Certainty Data Package (Laboratory to use applicable DEP CAM methods)</p>																						
If Presumptive Certainty Data Package is needed, initial all sections: <input checked="" type="checkbox"/> The required minimum field QC samples, as designated in BWSC CAM-VII have been or will be collected, as appropriate, to meet the requirements of Presumptive Certainty. Matrix Spike (MS) samples for MCP Metals and/or Cyanide are included and identified herein. <input checked="" type="checkbox"/> This Chain of Custody Record (specify) _____ includes <input checked="" type="checkbox"/> does not include samples defined as Drinking Water Samples.																	Required Reporting Limits and Data Quality Objectives <input checked="" type="checkbox"/> RC-S1 <input type="checkbox"/> S1 <input type="checkbox"/> GW1 <input type="checkbox"/> RC-S2 <input type="checkbox"/> S2 <input type="checkbox"/> GW2 <input type="checkbox"/> RC-GW1 <input type="checkbox"/> S3 <input type="checkbox"/> GW3 <input type="checkbox"/> RC-GW2					
If this Chain of Custody Record identifies samples defined as Drinking Water Samples, Trip Blanks and Field Duplicates are included and identified and analysis of TICs are required, as appropriate. Laboratory should (specify if applicable) _____ analyz																						

CHAIN OF CUSTODY RECORD

Phone	(617) 886-7400
Fax	(617) 886-7600

Page 3 of 3

H&A FILE NO.	06318-502
PROJECT NAME	Former Energy Intermittent Parcel
H&A CONTACT	J. Kullman

LABORATORY Acetest
ADDRESS Marlborough, MA
CONTACT K. Gribbins

DELIVERY DATE	11/29/10
TURNAROUND TIME	10 Day
PROJECT MANAGER	Coleman, A.

Sample No.					Date	Time	Depth	Type	Analysis Requested														Number of Containers	Comments (special instructions, precautions, additional method numbers, etc.)			
					VOA	ABA	PAT only	MCP Metals	Pesticides PCBs	VEH	Changes only Full Suite	Changes only Full Suite	Changes only Full Suite	TPE (specify)	TCLP (specify)	Residuality Stability	Residuality Stability	Residuality Stability									
HA111-4-6'-21					11/29/10	1415	4-6'	Soil																		Laboratory to use applicable DEP CAM methods, unless otherwise directed. ① PCBs	
HA111-6-8'-22						1410	6-8'																				
HA111-8-10'-23						1415	8-10'																				
HA111-10-12'-24						1420	10-12'																				
HA111-12-14'-25						1430	12-14'																				
HA111-14-16'-26						1440	14-16'																				
HA111-16-18'-27						1520	16-18'																				
Sampled and Relinquished by					Received by					LIQUID														Sampling Comments			
Sign <i>Wayne Harkin</i>					Sign <i>Wayne Harkin</i>																			VOA-Vial			
Print <i>Wayne Harkin</i>					Print <i>Wayne Harkin</i>																			Amber Glass			
Firm <i>Wayne Harkin</i>					Firm <i>Wayne Harkin</i>																			Plastic Bottle			
Date <i>11-29-10</i> Time <i>1615</i>					Date <i>11-29-10</i> Time <i>1615</i>																			Preservative			
Relinquished by					Received by																			Volume			
Sign <i>Wayne Harkin</i>					Sign <i>Wayne Harkin</i>					SOLID																	
Print <i>Wayne Harkin</i>					Print <i>Wayne Harkin</i>																			VOA Vial			
Firm <i>Wayne Harkin</i>					Firm <i>Wayne Harkin</i>																			Amber Glass			
Date <i>11-29-10</i> Time <i>1715</i>					Date <i>11-29-10</i> Time <i>1715</i>																			Clear Glass			
Relinquished by					Received by																			Preservative			
Sign					Sign																			Volume			
Print					Print																						
Firm					Firm																						
Date					Date																						
										PRESERVATION KEY																	
										A Sample chilled C NaOH E H ₂ SO ₄ G Methanol																	
										B Sample filtered D HNO ₃ F HCL H Water/NaHSO ₄ (circle)																	
Presumptive Certainty Data Package (Laboratory to use applicable DEP CAM methods)																											
If Presumptive Certainty Data Package is needed, initial all sections:																											
The required minimum field QC samples, as designated in BWSC CAM-VII have been or will be collected, to meet the requirements of Presumptive Certainty.																											
Matrix Spike (MS) samples for MCP Metals and/or Cyanide are included and identified herein.																											
This Chain of Custody Record (specify) _____ includes _____ does not include samples defined as Drinking Water Samples.																											
If this Chain of Custody Record identifies samples defined as Drinking Water Samples, Trip Blanks and Field Duplicates are included and identified and analysis of TICs are required, as appropriate. Laboratory should (specify if applicable) _____ analyz																											
Required Reporting Limits and Data Quality Objectives																											
<input checked="" type="checkbox"/> RC-S1 <input type="checkbox"/> S1 <input type="checkbox"/> GW1 <input type="checkbox"/> RC-S2 <input type="checkbox"/> S2 <input type="checkbox"/> GW2 <input type="checkbox"/> RC-GW1 <input type="checkbox"/> S3 <input type="checkbox"/> GW3 <input type="checkbox"/> RC-GW2																											

Frank D'Agostino

1796200

From: Parkin Kullmann, Jane [jkullmann@haleyaldrich.com]
Sent: Monday, December 13, 2010 2:14 PM
To: Frank D'Agostino
Subject: Energy International PCB soil analyses follow-up

Hi Frank,

I talked with my Project Manager for the Energy International project again, and he thought since the analyses were already conducted, that we should include in the report the results for the samples 8 feet and below for those sample locations specifically (i.e., HA-111, HA-112, and HA-113), as well as the additional samples that we are analyzing for PCBs from 0-2 and 2-4 ft bgs from those same boring locations. For any other boring locations where the results were not yet reported, we would just like to report the results for PCB analyses of soil from 0-2 and 2-4 ft bgs.

Let me know if you have any further questions or need any clarification about the analyses.

Thanks,
Jane

Jane A. Parkin Kullmann
Staff Engineer
HALEY & ALDRICH
465 Medford Street, Suite 2200
Boston, MA 02129-1400
Tel: 617.886.7354
Fax: 617.886.7654
Cell: 847.370.3018
Email: jkullmann@HaleyAldrich.com
www.HaleyAldrich.com

12/13/2010

M96200: Chain of Custody
Page 4 of 4



Massachusetts Department
of Environmental Protection
Bureau of Waste Site Cleanup

WSC-CAM

Exhibit VII A

July 1, 2010

Revision No. 1

Final

Page 13 of 38

Exhibit VII A-2: MassDEP Analytical Protocol Certification Form

MassDEP Analytical Protocol Certification Form

Laboratory Name: Accutest Laboratories of New England

Project #: M96200

Project Location: Former Energy International Parcel, MA

MADEP RTN

None

This form provides certifications for the following data set: list Laboratory Sample ID Numbers(s)

M96200-1,M96200-10,M96200-11,M96200-13,M96200-14,M96200-15,M96200-16,M96200-17, M96200-7,M96200-8,M96200-9
M96200-18,M96200-19,M96200-2,M96200-20,M96200-22,M96200-23,M96200-24,M96200-25, M96200-27,M96200-4,M96200-5,M96200-6,
M96200-26,

Matrices: Groundwater/Surface Water () Soil/Sediment (X) Drinking Water () Air () Other ()

CAM Protocol (check all that apply below):

8260 VOC () CAM IIA	7470/7471 Hg () CAM III B	MassDEP VPH () CAM IV A	8081 Pesticides () CAM V B	7196 Hex Cr () CAM VI B	Mass DEP APH () CAM IX A
8270 SVOC () CAM II B	7010 Metals () CAM III C	MassDEP EPH () CAM IV B	8151 Herbicides () CAM V C	8330 Explosives () CAM VIII A	TO-15 VOC () CAM IX B
6010 Metals () CAM III A	6020 Metals () CAM III D	8082 PCB (X) CAM V A	9014 Total () Cyanide/PAC CAM VI A	6860 Perchlorate () CAM VIII B	

Affirmative Responses to Questions A Through F are required for "Presumptive Certainty status

A	Were all samples received in a condition consistent with those described on the Chain-of Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
E	VPH, EPH, APH, and TO-15 only: a. VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

Responses to questions G, H, and I below is required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No ¹
Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data useability and representativeness requirements described in 310 CMR 40.1056(2)(k) and WSC-07-350.			
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No ¹
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No ¹

¹ All Negative responses must be addressed in an attached Environmental Laboratory case narrative.

I the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Signature:

Position:

Laboratory Director

Printed Name:

Reza Tand

Date:

12/18/2010

Internal Sample Tracking Chronicle

Haley & Aldrich

Job No: M96200

Former Energy International Parcel, MA
Project No: 06318-502

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M96200-1 Collected: 29-NOV-10 08:00 By: MD Received: 29-NOV-10 By: JB HA112_0-2'						
M96200-1	SM21 2540 B MOD.	13-DEC-10	HS			%SOL
M96200-1	SW846 8082	15-DEC-10 09:47	CZ	13-DEC-10	AJ	P8082SOXHLET
M96200-2 Collected: 29-NOV-10 08:05 By: MD Received: 29-NOV-10 By: JB HA112_2-4'						
M96200-2	SM21 2540 B MOD.	13-DEC-10	HS			%SOL
M96200-2	SW846 8082	15-DEC-10 10:01	CZ	13-DEC-10	AJ	P8082SOXHLET
M96200-4 Collected: 29-NOV-10 08:50 By: MD Received: 29-NOV-10 By: JB HA112_6-8'						
M96200-4	SM21 2540 B MOD.	03-DEC-10	HS			%SOL
M96200-4	SW846 8082	06-DEC-10 01:44	AP	02-DEC-10	AJ	P8082SOXHLET
M96200-5 Collected: 29-NOV-10 09:15 By: MD Received: 29-NOV-10 By: JB HA112_8-10'						
M96200-5	SM21 2540 B MOD.	01-DEC-10	HS			%SOL
M96200-5	SW846 8082	06-DEC-10 15:05	AP	02-DEC-10	AJ	P8082SOXHLET
M96200-6 Collected: 29-NOV-10 09:20 By: MD Received: 29-NOV-10 By: JB HA112_10-12'						
M96200-6	SM21 2540 B MOD.	01-DEC-10	HS			%SOL
M96200-6	SW846 8082	05-DEC-10 19:21	AP	02-DEC-10	AJ	P8082SOXHLET
M96200-7 Collected: 29-NOV-10 09:40 By: MD Received: 29-NOV-10 By: JB HA112_14-16.5'						
M96200-7	SM21 2540 B MOD.	01-DEC-10	HS			%SOL
M96200-7	SW846 8082	06-DEC-10 13:58	AP	02-DEC-10	AJ	P8082SOXHLET
M96200-8 Collected: 29-NOV-10 09:55 By: MD Received: 29-NOV-10 By: JB HA112_16.5-18.0'						
M96200-8	SM21 2540 B MOD.	01-DEC-10	HS			%SOL

Internal Sample Tracking Chronicle

Haley & Aldrich

Job No: M96200

Former Energy International Parcel, MA
Project No: 06318-502

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M96200-8	SW846 8082	05-DEC-10 19:44	AP	02-DEC-10	AJ	P8082SOXHLET
M96200-9 Collected: 29-NOV-10 11:10 By: MD Received: 29-NOV-10 By: JB HA113_0-2'						
M96200-9	SM21 2540 B MOD.	13-DEC-10	HS			%SOL
M96200-9	SW846 8082	15-DEC-10 10:23	CZ	13-DEC-10	AJ	P8082SOXHLET
M96200-9	SW846 8082	16-DEC-10 03:07	CZ	13-DEC-10	AJ	P8082SOXHLET
M96200-10 Collected: 29-NOV-10 09:35 By: MD Received: 29-NOV-10 By: JB HA112_12-14'						
M96200-10	SM21 2540 B MOD.	01-DEC-10	HS			%SOL
M96200-10	SW846 8082	05-DEC-10 20:06	AP	02-DEC-10	AJ	P8082SOXHLET
M96200-11 Collected: 29-NOV-10 11:00 By: MD Received: 29-NOV-10 By: JB HA113_2-4'						
M96200-11	SM21 2540 B MOD.	13-DEC-10	HS			%SOL
M96200-11	SW846 8082	15-DEC-10 10:37	CZ	13-DEC-10	AJ	P8082SOXHLET
M96200-13 Collected: 29-NOV-10 11:20 By: MD Received: 29-NOV-10 By: JB HA113_6-8'						
M96200-13	SM21 2540 B MOD.	03-DEC-10	HS			%SOL
M96200-13	SW846 8082	06-DEC-10 02:06	AP	02-DEC-10	AJ	P8082SOXHLET
M96200-14 Collected: 29-NOV-10 12:10 By: MD Received: 29-NOV-10 By: JB HA113_8-10'						
M96200-14	SM21 2540 B MOD.	01-DEC-10	HS			%SOL
M96200-14	SW846 8082	05-DEC-10 21:14	AP	02-DEC-10	AJ	P8082SOXHLET
M96200-15 Collected: 29-NOV-10 12:00 By: MD Received: 29-NOV-10 By: JB HA113_10-12'						
M96200-15	SM21 2540 B MOD.	01-DEC-10	HS			%SOL
M96200-15	SW846 8082	05-DEC-10 20:29	AP	02-DEC-10	AJ	P8082SOXHLET

Internal Sample Tracking Chronicle

Haley & Aldrich

Job No: M96200

Former Energy International Parcel, MA
Project No: 06318-502

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M96200-16 Collected: 29-NOV-10 12:25 By: MD Received: 29-NOV-10 By: JB HA113_12-14'						
M96200-16	SM21 2540 B MOD.	01-DEC-10	HS			%SOL
M96200-16	SW846 8082	05-DEC-10 21:36	AP	02-DEC-10	AJ	P8082SOXHLET
M96200-17 Collected: 29-NOV-10 12:20 By: MD Received: 29-NOV-10 By: JB HA113_14-15.5'						
M96200-17	SM21 2540 B MOD.	01-DEC-10	HS			%SOL
M96200-17	SW846 8082	05-DEC-10 21:59	AP	02-DEC-10	AJ	P8082SOXHLET
M96200-18 Collected: 29-NOV-10 13:00 By: MD Received: 29-NOV-10 By: JB HA113_15.5-18.0'						
M96200-18	SM21 2540 B MOD.	01-DEC-10	HS			%SOL
M96200-18	SW846 8082	05-DEC-10 22:21	AP	02-DEC-10	AJ	P8082SOXHLET
M96200-19 Collected: 29-NOV-10 13:40 By: MD Received: 29-NOV-10 By: JB HA111_0-2'						
M96200-19	SM21 2540 B MOD.	13-DEC-10	HS			%SOL
M96200-19	SW846 8082	16-DEC-10 03:29	CZ	13-DEC-10	AJ	P8082SOXHLET
M96200-19	SW846 8082	16-DEC-10 20:47	CZ	13-DEC-10	AJ	P8082SOXHLET
M96200-20 Collected: 29-NOV-10 13:30 By: MD Received: 29-NOV-10 By: JB HA111_2-4'						
M96200-20	SM21 2540 B MOD.	13-DEC-10	HS			%SOL
M96200-20	SW846 8082	16-DEC-10 21:44	CZ	13-DEC-10	AJ	P8082SOXHLET
M96200-22 Collected: 29-NOV-10 14:10 By: MD Received: 29-NOV-10 By: JB HA111_6-8'						
M96200-22	SM21 2540 B MOD.	03-DEC-10	HS			%SOL
M96200-22	SW846 8082	06-DEC-10 02:29	AP	02-DEC-10	AJ	P8082SOXHLET

Internal Sample Tracking Chronicle

Haley & Aldrich

Job No: M96200

Former Energy International Parcel, MA
Project No: 06318-502

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M96200-23 Collected: 29-NOV-10 14:15 By: MD Received: 29-NOV-10 By: JB HA111_8-10'						
M96200-23	SM21 2540 B MOD.	01-DEC-10	HS			%SOL
M96200-23	SW846 8082	05-DEC-10 22:44	AP	02-DEC-10	AJ	P8082SOXHLET
M96200-24 Collected: 29-NOV-10 14:20 By: MD Received: 29-NOV-10 By: JB HA111_10-12'						
M96200-24	SM21 2540 B MOD.	01-DEC-10	HS			%SOL
M96200-24	SW846 8082	05-DEC-10 23:06	AP	02-DEC-10	AJ	P8082SOXHLET
M96200-25 Collected: 29-NOV-10 14:30 By: MD Received: 29-NOV-10 By: JB HA111_12-14'						
M96200-25	SM21 2540 B MOD.	01-DEC-10	HS			%SOL
M96200-25	SW846 8082	05-DEC-10 23:29	AP	02-DEC-10	AJ	P8082SOXHLET
M96200-26 Collected: 29-NOV-10 14:40 By: MD Received: 29-NOV-10 By: JB HA111_14-16'						
M96200-26	SM21 2540 B MOD.	01-DEC-10	HS			%SOL
M96200-26	SW846 8082	05-DEC-10 23:51	AP	02-DEC-10	AJ	P8082SOXHLET
M96200-27 Collected: 29-NOV-10 15:20 By: MD Received: 29-NOV-10 By: JB HA111_16-18'						
M96200-27	SM21 2540 B MOD.	01-DEC-10	HS			%SOL
M96200-27	SW846 8082	06-DEC-10 00:14	AP	02-DEC-10	AJ	P8082SOXHLET

GC Semi-volatiles

5

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Page 1 of 1

Job Number: M96200

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23507-MB	BE22733.D	1	12/05/10	AP	12/02/10	OP23507	GBE1365

The QC reported here applies to the following samples:

Method: SW846 8082

M96200-4, M96200-5, M96200-6, M96200-7, M96200-8, M96200-10, M96200-13, M96200-14, M96200-15, M96200-16, M96200-17, M96200-18, M96200-22, M96200-23, M96200-24, M96200-25, M96200-26, M96200-27

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	99	ug/kg	
11104-28-2	Aroclor 1221	ND	99	ug/kg	
11141-16-5	Aroclor 1232	ND	99	ug/kg	
53469-21-9	Aroclor 1242	ND	99	ug/kg	
12672-29-6	Aroclor 1248	ND	99	ug/kg	
11097-69-1	Aroclor 1254	ND	99	ug/kg	
11096-82-5	Aroclor 1260	ND	99	ug/kg	
37324-23-5	Aroclor 1262	ND	99	ug/kg	
11100-14-4	Aroclor 1268	ND	99	ug/kg	

CAS No.	Surrogate Recoveries	Limits
877-09-8	Tetrachloro-m-xylene	103% 30-150%
877-09-8	Tetrachloro-m-xylene	101% 30-150%
2051-24-3	Decachlorobiphenyl	102% 30-150%
2051-24-3	Decachlorobiphenyl	99% 30-150%

Method Blank Summary

Page 1 of 1

Job Number: M96200
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23621-MB	YZ62990.D	1	12/15/10	CZ	12/13/10	OP23621	GYZ2675

The QC reported here applies to the following samples:

Method: SW846 8082

M96200-1, M96200-2, M96200-9, M96200-11, M96200-19, M96200-20

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	98	ug/kg	
11104-28-2	Aroclor 1221	ND	98	ug/kg	
11141-16-5	Aroclor 1232	ND	98	ug/kg	
53469-21-9	Aroclor 1242	ND	98	ug/kg	
12672-29-6	Aroclor 1248	ND	98	ug/kg	
11097-69-1	Aroclor 1254	ND	98	ug/kg	
11096-82-5	Aroclor 1260	ND	98	ug/kg	
37324-23-5	Aroclor 1262	ND	98	ug/kg	
11100-14-4	Aroclor 1268	ND	98	ug/kg	

CAS No.	Surrogate Recoveries	Limits
877-09-8	Tetrachloro-m-xylene	93% 30-150%
877-09-8	Tetrachloro-m-xylene	91% 30-150%
2051-24-3	Decachlorobiphenyl	97% 30-150%
2051-24-3	Decachlorobiphenyl	98% 30-150%

Blank Spike Summary

Page 1 of 1

Job Number: M96200

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23621-BS	YZ62991.D	1	12/15/10	CZ	12/13/10	OP23621	GYZ2675

The QC reported here applies to the following samples:

Method: SW846 8082

M96200-1, M96200-2, M96200-9, M96200-11, M96200-19, M96200-20

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
12674-11-2	Aroclor 1016	251	257	103	40-140
11104-28-2	Aroclor 1221		ND		40-140
11141-16-5	Aroclor 1232		ND		40-140
53469-21-9	Aroclor 1242		ND		40-140
12672-29-6	Aroclor 1248		ND		40-140
11097-69-1	Aroclor 1254		ND		40-140
11096-82-5	Aroclor 1260	251	268	107	40-140
37324-23-5	Aroclor 1262		ND		40-140
11100-14-4	Aroclor 1268		ND		40-140

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	94%	30-150%
877-09-8	Tetrachloro-m-xylene	95%	30-150%
2051-24-3	Decachlorobiphenyl	98%	30-150%
2051-24-3	Decachlorobiphenyl	99%	30-150%

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 1

Job Number: M96200

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23507-BS	BE22734.D	1	12/05/10	AP	12/02/10	OP23507	GBE1365
OP23507-BSD	BE22735.D	1	12/05/10	AP	12/02/10	OP23507	GBE1365

The QC reported here applies to the following samples:

Method: SW846 8082

M96200-4, M96200-5, M96200-6, M96200-7, M96200-8, M96200-10, M96200-13, M96200-14, M96200-15, M96200-16, M96200-17, M96200-18, M96200-22, M96200-23, M96200-24, M96200-25, M96200-26, M96200-27

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	265	279	105	280	106	0	40-140/30
11104-28-2	Aroclor 1221		ND		ND		nc	40-140/30
11141-16-5	Aroclor 1232		ND		ND		nc	40-140/30
53469-21-9	Aroclor 1242		ND		ND		nc	40-140/30
12672-29-6	Aroclor 1248		ND		ND		nc	40-140/30
11097-69-1	Aroclor 1254		ND		ND		nc	40-140/30
11096-82-5	Aroclor 1260	265	305	115	304	115	0	40-140/30
37324-23-5	Aroclor 1262		ND		ND		nc	40-140/30
11100-14-4	Aroclor 1268		ND		ND		nc	40-140/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
877-09-8	Tetrachloro-m-xylene	112%	107%	30-150%
877-09-8	Tetrachloro-m-xylene	104%	97%	30-150%
2051-24-3	Decachlorobiphenyl	107%	108%	30-150%
2051-24-3	Decachlorobiphenyl	107%	108%	30-150%

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: M96200
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23507-MS	BE22786.D	1	12/06/10	AP	12/02/10	OP23507	GBE1365
OP23507-MSD	BE22787.D	1	12/06/10	AP	12/02/10	OP23507	GBE1365
M96200-5	BE22788.D	1	12/06/10	AP	12/02/10	OP23507	GBE1365

The QC reported here applies to the following samples:

Method: SW846 8082

M96200-4, M96200-5, M96200-6, M96200-7, M96200-8, M96200-10, M96200-13, M96200-14, M96200-15, M96200-16, M96200-17, M96200-18, M96200-22, M96200-23, M96200-24, M96200-25, M96200-26, M96200-27

CAS No.	Compound	M96200-5 ug/kg	Spike Q	ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND	299		353	118	385	129	9	40-140/50
11104-28-2	Aroclor 1221	ND			ND		ND		nc	40-140/50
11141-16-5	Aroclor 1232	ND			ND		ND		nc	40-140/50
53469-21-9	Aroclor 1242	ND			ND		ND		nc	40-140/50
12672-29-6	Aroclor 1248	ND			ND		ND		nc	40-140/50
11097-69-1	Aroclor 1254	ND			ND		ND		nc	40-140/50
11096-82-5	Aroclor 1260	57.3	299		382	103	387	105	1	40-140/50
37324-23-5	Aroclor 1262	ND			ND		ND		nc	40-140/50
11100-14-4	Aroclor 1268	ND			ND		ND		nc	40-140/50

CAS No.	Surrogate Recoveries	MS	MSD	M96200-5	Limits
877-09-8	Tetrachloro-m-xylene	104%	116%	99%	30-150%
877-09-8	Tetrachloro-m-xylene	109%	125%	95%	30-150%
2051-24-3	Decachlorobiphenyl	85%	81%	87%	30-150%
2051-24-3	Decachlorobiphenyl	296% * a	209% * a	254% * a	30-150%

(a) Outside control limits due to possible matrix interference.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: M96200

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23621-MS	YZ62992.D	1	12/15/10	CZ	12/13/10	OP23621	GYZ2675
OP23621-MSD	YZ62993.D	1	12/15/10	CZ	12/13/10	OP23621	GYZ2675
M96200-1	YZ62994.D	1	12/15/10	CZ	12/13/10	OP23621	GYZ2675

The QC reported here applies to the following samples:

Method: SW846 8082

M96200-1, M96200-2, M96200-9, M96200-11, M96200-19, M96200-20

CAS No.	Compound	M96200-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND		287	280	98	227	78	21	40-140/50
11104-28-2	Aroclor 1221	ND			ND		ND		nc	40-140/50
11141-16-5	Aroclor 1232	ND			ND		ND		nc	40-140/50
53469-21-9	Aroclor 1242	ND			ND		ND		nc	40-140/50
12672-29-6	Aroclor 1248	ND			ND		ND		nc	40-140/50
11097-69-1	Aroclor 1254	ND			ND		ND		nc	40-140/50
11096-82-5	Aroclor 1260	ND		287	294	102	235	81	22	40-140/50
37324-23-5	Aroclor 1262	ND			ND		ND		nc	40-140/50
11100-14-4	Aroclor 1268	ND			ND		ND		nc	40-140/50

CAS No.	Surrogate Recoveries	MS	MSD	M96200-1	Limits
877-09-8	Tetrachloro-m-xylene	87%	83%	89%	30-150%
877-09-8	Tetrachloro-m-xylene	60%	84%	77%	30-150%
2051-24-3	Decachlorobiphenyl	442% * a	505% * a	367% * a	30-150%
2051-24-3	Decachlorobiphenyl	122%	139%	126%	30-150%

(a) Outside control limits due to possible matrix interference.

Semivolatile Surrogate Recovery Summary

Page 1 of 2

Job Number: M96200
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Method: SW846 8082 **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a	S1 ^b	S2 ^a	S2 ^b
M96200-1	YZ62994.D	89.0	77.0	367.0* ^c	126.0
M96200-2	YZ62995.D	77.0	77.0	734.0* ^c	79.0
M96200-4	BE22753.D	99.0	68.0	94.0	114.0
M96200-5	BE22788.D	99.0	95.0	87.0	254.0* ^c
M96200-6	BE22736.D	89.0	112.0	86.0	108.0
M96200-7	BE22785.D	112.0	119.0	98.0	115.0
M96200-8	BE22737.D	104.0	103.0	107.0	109.0
M96200-9	YZ63041.D	0.0* ^d	0.0* ^d	0.0* ^d	0.0* ^d
M96200-9	YZ62996.D	80.0	83.0	326.0* ^c	175.0* ^c
M96200-10	BE22738.D	128.0	115.0	112.0	104.0
M96200-11	YZ62997.D	83.0	78.0	184.0* ^c	77.0
M96200-13	BE22754.D	90.0	104.0	91.0	97.0
M96200-14	BE22741.D	133.0	132.0	116.0	122.0
M96200-15	BE22739.D	97.0	93.0	86.0	84.0
M96200-16	BE22742.D	132.0	107.0	105.0	127.0
M96200-17	BE22743.D	124.0	112.0	97.0	110.0
M96200-18	BE22744.D	111.0	114.0	109.0	146.0
M96200-19	YZ63075.D	93.0	118.0	245.0* ^c	136.0
M96200-19	YZ63042.D	0.0* ^d	0.0* ^d	0.0* ^d	0.0* ^d
M96200-20	YZ63077.D	93.0	89.0	162.0* ^c	139.0
M96200-22	BE22755.D	102.0	102.0	92.0	94.0
M96200-23	BE22745.D	134.0	135.0	114.0	138.0
M96200-24	BE22746.D	93.0	94.0	83.0	96.0
M96200-25	BE22747.D	109.0	102.0	96.0	102.0
M96200-26	BE22748.D	376.0* ^c	81.0	90.0	104.0
M96200-27	BE22749.D	118.0	107.0	104.0	94.0
OP23507-BS	BE22734.D	112.0	104.0	107.0	107.0
OP23507-BSD	BE22735.D	107.0	97.0	108.0	108.0
OP23507-MB	BE22733.D	103.0	101.0	102.0	99.0
OP23507-MS	BE22786.D	104.0	109.0	85.0	296.0* ^c
OP23507-MSD	BE22787.D	116.0	125.0	81.0	209.0* ^c
OP23621-BS	YZ62991.D	94.0	95.0	98.0	99.0
OP23621-MB	YZ62990.D	93.0	91.0	97.0	98.0
OP23621-MS	YZ62992.D	87.0	60.0	442.0* ^c	122.0
OP23621-MSD	YZ62993.D	83.0	84.0	505.0* ^c	139.0

**Surrogate
Compounds**

**Recovery
Limits**

S1 = Tetrachloro-m-xylene

30-150%

Semivolatile Surrogate Recovery Summary

Job Number: M96200
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Method: SW846 8082	Matrix: SO
--------------------	------------

Samples and QC shown here apply to the above method

Surrogate Compounds	Recovery Limits
S2 = Decachlorobiphenyl	30-150%

- (a) Recovery from GC signal #1
- (b) Recovery from GC signal #2
- (c) Outside control limits due to possible matrix interference.
- (d) Outside control limits due to dilution.

5.5.1
5



12/20/10

Technical Report for

Haley & Aldrich

Former Energy International Parcel, MA

06318-502

Accutest Job Number: M96225

Sampling Date: 11/30/10

Report to:

Haley & Aldrich

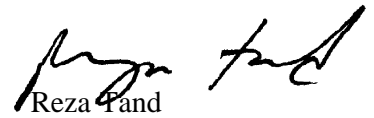
jkullmann@haleyaldrich.com

ATTN: Jane Kullmann

Total number of pages in report: **214**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.


Reza Pand
Lab Director

Client Service contact: Kristen Blanchard 508-481-6200

Certifications: MA (M-MA136,SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) ME (MA00136) FL (E87579) NY (11791) NJ (MA926) PA (6801121) ND (R-188) CO MN (11546AA) NC (653) IL (002337) ISO 17025:2005 (L2235)

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Table of Contents

-1-

Section 1: Sample Summary	4
Section 2: Case Narrative/Conformance Summary	6
Section 3: Sample Results	12
3.1: M96225-1: HA110_0-4'	13
3.2: M96225-1A: HA110_0-4'	23
3.3: M96225-2: HA110_4-8'	24
3.4: M96225-2A: HA110_4-8'	33
3.5: M96225-3: HA109_0-4'	34
3.6: M96225-3A: HA109_0-4'	43
3.7: M96225-4: HA109_8-12'	44
3.8: M96225-4A: HA109_8-12'	53
3.9: M96225-5: HA108_0-4'	54
3.10: M96225-5A: HA108_0-4'	63
3.11: M96225-6: HA108_4-8'	64
3.12: M96225-6A: HA108_4-8'	73
3.13: M96225-7: HA107_0-4'	74
3.14: M96225-7A: HA107_0-4'	83
3.15: M96225-8: HA107_8-12'	84
3.16: M96225-8A: HA107_8-12'	93
Section 4: Misc. Forms	94
4.1: Certification Exceptions	95
4.2: Chain of Custody	96
4.3: MCP Form	97
4.4: EPH Form	98
4.5: VPH Form	106
4.6: Sample Tracking Chronicle	114
Section 5: GC/MS Volatiles - QC Data Summaries	119
5.1: Method Blank Summary	120
5.2: Blank Spike/Blank Spike Duplicate Summary	123
5.3: Matrix Spike/Matrix Spike Duplicate Summary	126
5.4: Internal Standard Area Summaries	129
5.5: Surrogate Recovery Summaries	130
Section 6: GC/MS Semi-volatiles - QC Data Summaries	131
6.1: Method Blank Summary	132
6.2: Blank Spike/Blank Spike Duplicate Summary	134
6.3: Matrix Spike/Matrix Spike Duplicate Summary	137
6.4: Internal Standard Area Summaries	140
6.5: Surrogate Recovery Summaries	142
Section 7: GC Volatiles - QC Data Summaries	143
7.1: Method Blank Summary	144
7.2: Blank Spike/Blank Spike Duplicate Summary	146
7.3: Matrix Spike/Matrix Spike Duplicate Summary	148

Table of Contents

-2-

7.4: Surrogate Recovery Summaries	149
Section 8: GC Semi-volatiles - QC Data Summaries	150
8.1: Method Blank Summary	151
8.2: Blank Spike/Blank Spike Duplicate Summary	152
8.3: Matrix Spike/Matrix Spike Duplicate Summary	153
8.4: Surrogate Recovery Summaries	154
Section 9: Metals Analysis - QC Data Summaries	155
9.1: Prep QC MP16325: Sb,As,Ba,Be,Cd,Cr,Pb,Ni,Se,Ag,Tl,V,Zn	156
9.2: Prep QC MP16330: Sb,As,Ba,Be,Cd,Cr,Pb,Ni,Se,Ag,Tl,V,Zn	168
9.3: Prep QC MP16331: Hg	182
9.4: Prep QC MP16339: Pb	186
9.5: Prep QC MP16345: Hg	194
9.6: Prep QC MP16354: Pb	198
9.7: Prep QC MP16357: Hg	208
Section 10: General Chemistry - QC Data Summaries	211
10.1: Method Blank and Spike Results Summary	212
10.2: Duplicate Results Summary	213
10.3: Matrix Spike Results Summary	214



Sample Summary

Haley & Aldrich

Job No: M96225

Former Energy International Parcel, MA
Project No: 06318-502

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
M96225-1	11/30/10	08:00 MD	11/30/10	SO	Soil	HA110_0-4'
M96225-1A	11/30/10	08:00 MD	11/30/10	SO	Soil	HA110_0-4'
M96225-2	11/30/10	08:35 MD	11/30/10	SO	Soil	HA110_4-8'
M96225-2A	11/30/10	08:35 MD	11/30/10	SO	Soil	HA110_4-8'
M96225-3	11/30/10	10:00 MD	11/30/10	SO	Soil	HA109_0-4'
M96225-3A	11/30/10	10:00 MD	11/30/10	SO	Soil	HA109_0-4'
M96225-4	11/30/10	10:55 MD	11/30/10	SO	Soil	HA109_8-12'
M96225-4A	11/30/10	10:55 MD	11/30/10	SO	Soil	HA109_8-12'
M96225-5	11/30/10	12:30 MD	11/30/10	SO	Soil	HA108_0-4'
M96225-5A	11/30/10	12:30 MD	11/30/10	SO	Soil	HA108_0-4'
M96225-6	11/30/10	13:05 MD	11/30/10	SO	Soil	HA108_4-8'
M96225-6A	11/30/10	13:05 MD	11/30/10	SO	Soil	HA108_4-8'
M96225-7	11/30/10	14:10 MD	11/30/10	SO	Soil	HA107_0-4'

Soil samples reported on a dry weight basis unless otherwise indicated on result page.



Sample Summary
(continued)

Haley & Aldrich

Job No: M96225

Former Energy International Parcel, MA
Project No: 06318-502

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
M96225-7A	11/30/10	14:10 MD	11/30/10	SO	Soil	HA107_0-4'
M96225-8	11/30/10	15:05 MD	11/30/10	SO	Soil	HA107_8-12'
M96225-8A	11/30/10	15:05 MD	11/30/10	SO	Soil	HA107_8-12'
M96225-8AD	11/30/10	15:05 MD	11/30/10	SO	Soil	HA107_8-12'
M96225-8AS	11/30/10	15:05 MD	11/30/10	SO	Soil	HA107_8-12'
M96225-8D	11/30/10	15:05 MD	11/30/10	SO	Soil Dup/MSD	HA107_8-12'
M96225-8S	11/30/10	15:05 MD	11/30/10	SO	Soil Matrix Spike	HA107_8-12'

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Haley & Aldrich**Job No** M96225**Site:** Former Energy International Parcel, MA**Report Date** 12/20/2010 1:17:51 PM

8 Sample(s) were collected on 11/30/2010 and were received at Accutest on 11/30/2010 properly preserved, at 2.3 Deg. C and intact. These Samples received an Accutest job number of M96225. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix: SO**Batch ID:** MSR663

- All samples were analyzed within the recommended method holding time.
- Sample(s) M96199-5MS, M96199-5MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Blank Spike Recovery(s) for Hexachlorobutadiene, Isopropylbenzene are outside control limits. Blank Spike meets program technical requirements.
- Matrix Spike Recovery(s) for Vinyl chloride are outside control limits. Outside control limits due to possible matrix interference. Refer to Blank Spike.
- Matrix Spike Duplicate Recovery(s) for 2-Hexanone, Acetone, Carbon tetrachloride, Hexachlorobutadiene, Isopropylbenzene are outside control limits. Outside control limits due to possible matrix interference. Refer to Blank Spike.
- Continuing calibration check standard MSR663-CC638 for chloromethane, trichlorofluoromethane, Tetrahydrofuran, carbon tetrachloride, dibromochloromethane, 1,1,1,2-tetrachloroethane, hexachlorobutadiene exceed 20% Difference. This check standard met MCP criteria.
- The response factor (RF) for the 2-Butanone low point in the initial calibration MSR638-ICC638 is 0.028, less than the required RF of 0.1 as noted in Table 4 of SW846 8260C. 2-Butanone is a potential difficult compound.
- Initial calibration verification MSR638-ICV638 for acetone, isopropylbenzene exceed 30% Difference.
- BSD Recovery(s) for Carbon tetrachloride, Dibromochloromethane, Tetrachloroethene, Hexachlorobutadiene, Isopropylbenzene are outside control limits. Blank Spike meets program technical requirements.

Extractables by GCMS By Method SW846 8270C

Matrix: SO

Batch ID: OP23515

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M96225-8MS, M96225-8MSD were used as the QC samples indicated.
- BS, MS Recovery(s) for Benzoic acid, Hexachlorocyclopentadiene are outside control limits. Blank Spike meets program technical requirements.
- Matrix Spike Recovery(s) for Fluoranthene is outside control limits. Outside control limits due to high level in sample relative to spike amount.
- Matrix Spike Duplicate Recovery(s) for Hexachloroethane, 2-Methylnaphthalene, 3,3'-Dichlorobenzidine, Acenaphthene, Acenaphthylene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Chrysene, Dibenzo(a,h)anthracene, Dibenzofuran, Fluorene, Indeno(1,2,3-cd)pyrene are outside control limits. Outside control limits due to possible matrix interference. Refer to Blank Spike.
- RPD(s) for MSD for 2-Methylnaphthalene, 3,3'-Dichlorobenzidine, Acenaphthene, Acenaphthylene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, bis(2-Ethylhexyl)phthalate, Chrysene, Dibenzo(a,h)anthracene, Dibenzofuran, Fluorene, Indeno(1,2,3-cd)pyrene, N-Nitrosodiphenylamine, Phenanthrene, Pyrene are outside control limits for sample OP23515-MSD. High RPD due to possible matrix interference and/or sample non-homogeneity.
- Matrix Spike Recovery(s) for 3,3'-Dichlorobenzidine, Hexachloroethane, Naphthalene are outside control limits. Outside control limits due to possible matrix interference. Refer to Blank Spike.
- RPD of OP23515-MSD for Fluoranthene: Outside control limits due to high level in sample relative to spike amount.
- RPD of OP23515-MSD for 2,4-Dinitrophenol: Outside control limits. Blank Spike meets program technical requirements.
- BSD, MSD Recovery(s) for Benzoic acid, 2,4-Dinitrophenol, Hexachlorocyclopentadiene are outside control limits. Blank Spike meets program technical requirements.
- Continuing calibration check standard MSS816-CC805 for bis(2-Ethylhexyl)phthalat, Di-n-octylphthalate exceed 20% Difference. This check standard met MCP criteria.
- Initial calibration verification standard MSS806-ICV805 file S19551 for Aniline, 4-Chloroaniline, 3,3'-Dichlorobenzidine, Hexachlorocyclopentadiene exceeds 30% Difference
- MSD Recovery(s) for Fluoranthene, Phenanthrene, Pyrene is outside control limits. Outside control limits due to high level in sample relative to spike amount.

Volatiles by GC By Method MADEP VPH REV 1.1

Matrix: SO

Batch ID: GBH926

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- M96225-2, M96225-3 for 2,5-Dibromotoluene: Outside control limits due to possible matrix interference. Confirmed by reanalysis.
- Only Range requested.

Matrix: SO

Batch ID: GBH929

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- M96225-2, M96225-3: Confirmation run.
- M96225-2, M96225-3 for 2,5-Dibromotoluene: Outside control limits due to possible matrix interference. Confirmed by reanalysis.
- Only range requested.

Extractables by GC By Method MADEP EPH REV 1.1

Matrix: SO

Batch ID: OP23506

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M96225-8MS, M96225-8MSD were used as the QC samples indicated.
- MS/MSD Recovery(s) for C11-C22 Aromatics (Unadj.) are outside control limits. Outside control limits due to high level in sample relative to spike amount.
- SOnly range requested.
- OP23506-MS for o-Terphenyl: Outside control limits due to matrix interference. Confirmed by reanalysis.
- OP23506-MS/MSD for o-Terphenyl: Outside control limits due to matrix interference. Confirmed by reanalysis.
- M96225-1, M96225-3 for o-Terphenyl: Outside control limits due to possible matrix interference.
- OP23506-BS/BSD: Aromatic breakthrough (naphthalene and/or 2-methylnaphthalene) exceeded 5% method limit. Results confirmed by refractionation.
- M96225-6 for 1-Chlorooctadecane: Outside control limits due to possible matrix interference. Confirmed by refractionation.

Metals By Method SW846 6010C

Matrix: LEACHATE

Batch ID: MP16339

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M96225-8ADUP, M96225-8AMS, M96225-8ASDL were used as the QC samples for metals.

Matrix: LEACHATE

Batch ID: MP16354

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M96199-5ADUP, M96199-5AMS, M96199-5ASDL, M96289-4ALS were used as the QC samples for metals.

Matrix: SO

Batch ID: MP16325

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M96199-5DUP, M96199-5MS, M96199-5PS, M96199-5SDL, M96199-5DUP were used as the QC samples for metals.
- Matrix Spike Recovery(s) for Antimony, Barium are outside control limits. Spike recovery indicates possible matrix interference and/or sample nonhomogeneity. Post spike is not within acceptable range.
- Matrix Spike Recovery(s) for Lead are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
- RPD(s) for Duplicate for Antimony, Barium are outside control limits for sample MP16325-D1. High RPD due to possible matrix interference and/or sample non-homogeneity.
- RPD(s) for Serial Dilution for Antimony, Selenium, Silver are outside control limits for sample MP16325-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- MP16325-D1 for Thallium: RPD acceptable due to low duplicate and sample concentrations.
- MP16325-SD1 for Nickel, Zinc, Chromium: Serial dilution indicates possible matrix interference.

Matrix: SO

Batch ID: MP16330

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M96225-8DUP, M96225-8MS, M96225-8PS, M96225-8SDL, M96225-8DUP were used as the QC samples for metals.
- Matrix Spike Recovery(s) for Antimony, Lead are outside control limits. Spike recovery indicates possible matrix interference and/or sample nonhomogeneity. Post spike within acceptable range.
- RPD(s) for Duplicate for Antimony are outside control limits for sample MP16330-D1. RPD acceptable due to low duplicate and sample concentrations.
- RPD(s) for Serial Dilution for Antimony are outside control limits for sample MP16330-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- MP16330-SD1 for Zinc: Serial dilution indicates possible matrix interference.

Metals By Method SW846 7470A

Matrix: LEACHATE

Batch ID: MP16357

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M96225-2ADUP, M96225-2AMS were used as the QC samples for metals.

Metals By Method SW846 7471A

Matrix: SO

Batch ID: MP16331

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M96199-5DUP, M96199-5MS were used as the QC samples for metals.
- Matrix Spike Recovery(s) for Mercury are outside control limits. Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.
- RPD(s) for Duplicate for Mercury are outside control limits for sample MP16331-D1. High RPD due to possible matrix interference and/or sample non-homogeneity.

Matrix: SO

Batch ID: MP16345

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M96225-8DUP, M96225-8MS were used as the QC samples for metals.
- Matrix Spike Recovery(s) for Mercury are outside control limits. Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.

Wet Chemistry By Method ASTM D1498-76M

Matrix: SO

Batch ID: GN33622

- Sample(s) M96225-8DUP were used as the QC samples for Redox Potential Vs H2.
- M96225-1 through M96225-8 for Redox Potential Vs H2: Analysis requested after recommended holding time.
- GN33622-D1 for Redox Potential Vs H2: Analysis requested after recommended holding time.

Wet Chemistry By Method SM21 2540 B MOD.

Matrix: SO

Batch ID: GN33605

- Sample(s) M96225-8DUP were used as the QC samples for Solids, Percent.

Matrix: SO

Batch ID: GN33609

- Sample(s) M96200-13DUP were used as the QC samples for Solids, Percent.

Wet Chemistry By Method SW846 1020

Matrix: SO

Batch ID: GN33600

- Sample(s) M96199-5DUP were used as the QC samples for Ignitability (Flashpoint).

Wet Chemistry By Method SW846 CHAP7

Matrix: SO

Batch ID: GN33617

- Sample(s) M96225-8DUP were used as the QC samples for Corrosivity as pH.

Matrix: SO

Batch ID: GP12374

- All samples were distilled within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M96225-8DUP, M96225-8MS were used as the QC samples for Cyanide Reactivity.

Matrix: SO

Batch ID: GP12375

- All samples were distilled within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M96225-8DUP, M96225-8MS were used as the QC samples for Sulfide Reactivity.

Accutest may not have met all requested limits due to methodology limitations, sample matrix, dilutions, or percents solids.

The Accutest Laboratories of New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety. The Accutest Laboratories of NE, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report(M96225).

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	HA110_0-4'	Date Sampled:	11/30/10
Lab Sample ID:	M96225-1	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	87.5
Method:	SW846 8260B		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R18612.D	1	12/07/10	GK	n/a	n/a	MSR663
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	11.6 g	10.0 ml	100 ul
Run #2			

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	280	ug/kg	
71-43-2	Benzene	35.5	28	ug/kg	
108-86-1	Bromobenzene	ND	280	ug/kg	
74-97-5	Bromochloromethane	ND	280	ug/kg	
75-27-4	Bromodichloromethane	ND	110	ug/kg	
75-25-2	Bromoform	ND	110	ug/kg	
74-83-9	Bromomethane	ND	110	ug/kg	
78-93-3	2-Butanone (MEK)	ND	280	ug/kg	
104-51-8	n-Butylbenzene	ND	280	ug/kg	
135-98-8	sec-Butylbenzene	ND	280	ug/kg	
98-06-6	tert-Butylbenzene	ND	280	ug/kg	
75-15-0	Carbon disulfide	ND	280	ug/kg	
56-23-5	Carbon tetrachloride	ND	110	ug/kg	
108-90-7	Chlorobenzene	ND	110	ug/kg	
75-00-3	Chloroethane	ND	280	ug/kg	
67-66-3	Chloroform	ND	110	ug/kg	
74-87-3	Chloromethane	ND	280	ug/kg	
95-49-8	o-Chlorotoluene	ND	280	ug/kg	
106-43-4	p-Chlorotoluene	ND	280	ug/kg	
108-20-3	Di-Isopropyl ether	ND	110	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	280	ug/kg	
124-48-1	Dibromochloromethane	ND	110	ug/kg	
106-93-4	1,2-Dibromoethane	ND	110	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	110	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	110	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	110	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	110	ug/kg	
75-34-3	1,1-Dichloroethane	ND	110	ug/kg	
107-06-2	1,2-Dichloroethane	ND	110	ug/kg	
75-35-4	1,1-Dichloroethene	ND	110	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	110	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	110	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA110_0-4'	Date Sampled:	11/30/10
Lab Sample ID:	M96225-1	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	87.5
Method:	SW846 8260B		
Project:	Former Energy International Parcel, MA		

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
78-87-5	1,2-Dichloropropane	ND	110	ug/kg	
142-28-9	1,3-Dichloropropane	ND	280	ug/kg	
594-20-7	2,2-Dichloropropane	ND	280	ug/kg	
563-58-6	1,1-Dichloropropene	ND	280	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	110	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	110	ug/kg	
123-91-1	1,4-Dioxane	ND	1400	ug/kg	
60-29-7	Ethyl Ether	ND	280	ug/kg	
100-41-4	Ethylbenzene	ND	110	ug/kg	
87-68-3	Hexachlorobutadiene	ND	280	ug/kg	
591-78-6	2-Hexanone	ND	280	ug/kg	
98-82-8	Isopropylbenzene	ND	280	ug/kg	
99-87-6	p-Isopropyltoluene	ND	280	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	110	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	280	ug/kg	
74-95-3	Methylene bromide	ND	280	ug/kg	
75-09-2	Methylene chloride	ND	110	ug/kg	
91-20-3	Naphthalene	357	280	ug/kg	
103-65-1	n-Propylbenzene	ND	280	ug/kg	
100-42-5	Styrene	ND	280	ug/kg	
994-05-8	tert-Amyl Methyl Ether	ND	280	ug/kg	
637-92-3	tert-Butyl Ethyl Ether	ND	110	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	280	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	110	ug/kg	
127-18-4	Tetrachloroethene	ND	110	ug/kg	
109-99-9	Tetrahydrofuran	ND	560	ug/kg	
108-88-3	Toluene	ND	280	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	280	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	280	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	110	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	110	ug/kg	
79-01-6	Trichloroethene	ND	110	ug/kg	
75-69-4	Trichlorofluoromethane	ND	110	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	280	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	280	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	280	ug/kg	
75-01-4	Vinyl chloride	ND	110	ug/kg	
	m,p-Xylene	ND	110	ug/kg	
95-47-6	o-Xylene	ND	110	ug/kg	
1330-20-7	Xylene (total)	120	110	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA110_0-4'**Lab Sample ID:** M96225-1**Matrix:** SO - Soil**Method:** SW846 8260B**Project:** Former Energy International Parcel, MA**Date Sampled:** 11/30/10**Date Received:** 11/30/10**Percent Solids:** 87.5

VOA MCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		70-130%
2037-26-5	Toluene-D8	108%		70-130%
460-00-4	4-Bromofluorobenzene	105%		70-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA110_0-4'	Date Sampled:	11/30/10
Lab Sample ID:	M96225-1	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	87.5
Method:	SW846 8270C SW846 3545		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	S19774.D	1	12/07/10	PR	12/03/10	OP23515	MSS816
Run #2	S19788.D	10	12/07/10	PR	12/03/10	OP23515	MSS818

	Initial Weight	Final Volume
Run #1	20.1 g	1.0 ml
Run #2	20.1 g	1.0 ml

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
65-85-0	Benzoic acid	685	570	ug/kg	
95-57-8	2-Chlorophenol	ND	280	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	570	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	570	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	570	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1100	ug/kg	
95-48-7	2-Methylphenol	ND	570	ug/kg	
	3&4-Methylphenol	ND	570	ug/kg	
88-75-5	2-Nitrophenol	ND	570	ug/kg	
100-02-7	4-Nitrophenol	ND	1100	ug/kg	
87-86-5	Pentachlorophenol	ND	570	ug/kg	
108-95-2	Phenol	ND	280	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	570	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	570	ug/kg	
83-32-9	Acenaphthene	2130	280	ug/kg	
208-96-8	Acenaphthylene	980	280	ug/kg	
98-86-2	Acetophenone	ND	570	ug/kg	
62-53-3	Aniline	ND	570	ug/kg	
120-12-7	Anthracene	5630	280	ug/kg	
56-55-3	Benzo(a)anthracene	16800 ^a	2800	ug/kg	
50-32-8	Benzo(a)pyrene	9720	280	ug/kg	
205-99-2	Benzo(b)fluoranthene	11000 ^a	2800	ug/kg	
191-24-2	Benzo(g,h,i)perylene	3880	280	ug/kg	
207-08-9	Benzo(k)fluoranthene	5560	280	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	280	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	280	ug/kg	
91-58-7	2-Chloronaphthalene	ND	280	ug/kg	
106-47-8	4-Chloroaniline	ND	570	ug/kg	
218-01-9	Chrysene	16600 ^a	2800	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	280	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	280	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	280	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA110_0-4'	Date Sampled:	11/30/10
Lab Sample ID:	M96225-1	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	87.5
Method:	SW846 8270C SW846 3545		
Project:	Former Energy International Parcel, MA		

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	280	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	280	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	280	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	280	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	570	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	570	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	280	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	2380	280	ug/kg	
132-64-9	Dibenzofuran	1630	280	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	280	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	280	ug/kg	
84-66-2	Diethyl phthalate	ND	280	ug/kg	
131-11-3	Dimethyl phthalate	ND	280	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	280	ug/kg	
206-44-0	Fluoranthene	31500 ^a	2800	ug/kg	
86-73-7	Fluorene	2410	280	ug/kg	
118-74-1	Hexachlorobenzene	ND	280	ug/kg	
87-68-3	Hexachlorobutadiene	ND	280	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	570	ug/kg	
67-72-1	Hexachloroethane	ND	280	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	4540	280	ug/kg	
78-59-1	Isophorone	ND	280	ug/kg	
91-57-6	2-Methylnaphthalene	1010	280	ug/kg	
91-20-3	Naphthalene	2530	280	ug/kg	
98-95-3	Nitrobenzene	ND	280	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	280	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	280	ug/kg	
85-01-8	Phenanthrene	23200 ^a	2800	ug/kg	
129-00-0	Pyrene	27200 ^a	2800	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	280	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	55%	61%	30-130%
4165-62-2	Phenol-d5	63%	70%	30-130%
118-79-6	2,4,6-Tribromophenol	49%	38%	30-130%
4165-60-0	Nitrobenzene-d5	60%	65%	30-130%
321-60-8	2-Fluorobiphenyl	70%	77%	30-130%
1718-51-0	Terphenyl-d14	72%	100%	30-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA110_0-4'**Lab Sample ID:** M96225-1**Matrix:** SO - Soil**Method:** SW846 8270C SW846 3545**Project:** Former Energy International Parcel, MA**Date Sampled:** 11/30/10**Date Received:** 11/30/10**Percent Solids:** 87.5

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
---------	----------	--------	----	-------	---

(a) Result is from Run# 2

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA110_0-4'	Date Sampled:	11/30/10
Lab Sample ID:	M96225-1	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	87.5
Method:	MADEP VPH REV 1.1		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BH17792.D	1	12/06/10	AP	n/a	n/a	GBH926
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	11.6 g	11.0 ml	100 ul
Run #2			

Volatile TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C5- C8 Aliphatics (Unadj.)	ND	6100	ug/kg	
	C9- C12 Aliphatics (Unadj.)	ND	6100	ug/kg	
	C9- C10 Aromatics (Unadj.)	ND	6100	ug/kg	
	C5- C8 Aliphatics	ND	6100	ug/kg	
	C9- C12 Aliphatics	ND	6100	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	96%		70-130%
615-59-8	2,5-Dibromotoluene	89%		70-130%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA110_0-4'	Date Sampled:	11/30/10
Lab Sample ID:	M96225-1	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	87.5
Method:	MADEP EPH REV 1.1 SW846 3550B		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BI2550.D	1	12/04/10	JD	12/02/10	OP23506	GBI96
Run #2							

	Initial Weight	Final Volume
Run #1	11.8 g	2.0 ml
Run #2		

Extractable TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C11-C22 Aromatics (Unadj.)	527000	19000	ug/kg	
	C9-C18 Aliphatics	21000	9700	ug/kg	
	C19-C36 Aliphatics	102000	9700	ug/kg	
	C11-C22 Aromatics	351000	19000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	142% ^a		40-140%
321-60-8	2-Fluorobiphenyl	73%		40-140%
580-13-2	2-Bromonaphthalene	42%		40-140%
3386-33-2	1-Chlorooctadecane	70%		40-140%

(a) Outside control limits due to possible matrix interference.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA110_0-4'

Lab Sample ID: M96225-1

Matrix: SO - Soil

Date Sampled: 11/30/10

Date Received: 11/30/10

Percent Solids: 87.5

Project: Former Energy International Parcel, MA

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Antimony	< 0.89	0.89	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Arsenic	11.7	0.89	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Barium	134	4.4	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Beryllium	0.45	0.35	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Cadmium	0.51	0.35	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Chromium	14.8	0.89	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Lead	150	0.89	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Mercury	1.3	0.070	mg/kg	2	12/03/10	12/03/10 PY	SW846 7471A ¹	SW846 7471A ⁴
Nickel	18.8	3.5	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Selenium	< 0.89	0.89	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Silver	< 0.44	0.44	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Thallium	< 0.89	0.89	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Vanadium	21.3	0.89	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Zinc	167	1.8	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³

(1) Instrument QC Batch: MA12492

(2) Instrument QC Batch: MA12497

(3) Prep QC Batch: MP16325

(4) Prep QC Batch: MP16331

RL = Reporting Limit

Report of Analysis

Client Sample ID: HA110_0-4'**Lab Sample ID:** M96225-1**Matrix:** SO - Soil**Date Sampled:** 11/30/10**Date Received:** 11/30/10**Percent Solids:** 87.5**Project:** Former Energy International Parcel, MA

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Corrosivity as pH	10.7			1	12/03/10	MA	SW846 CHAP7
Cyanide Reactivity	< 1.7	1.7	mg/kg	1	12/06/10	BF	SW846 CHAP7
Ignitability (Flashpoint)	> 230		Deg. F	1	12/06/10	BF	SW846 1020
Redox Potential Vs H2 ^a	342		mv	1	12/03/10	MC	ASTM D1498-76M
Solids, Percent	87.5		%	1	12/02/10	HS	SM21 2540 B MOD.
Sulfide Reactivity	< 57	57	mg/kg	1	12/06/10	BF	SW846 CHAP7

(a) Analysis requested after recommended holding time.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HA110_0-4'	Date Sampled:	11/30/10
Lab Sample ID:	M96225-1A	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	87.5
Project:	Former Energy International Parcel, MA		

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	0.015	D008	5.0	0.010	mg/l	1	12/09/10	12/09/10 DA	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA12508
(2) Prep QC Batch: MP16354

RL = Reporting Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)

Report of Analysis

Client Sample ID:	HA110_4-8'	Date Sampled:	11/30/10
Lab Sample ID:	M96225-2	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	83.5
Method:	SW846 8260B		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R18613.D	1	12/07/10	GK	n/a	n/a	MSR663
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	10.6 g	10.0 ml	100 ul
Run #2			

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	330	ug/kg	
71-43-2	Benzene	ND	33	ug/kg	
108-86-1	Bromobenzene	ND	330	ug/kg	
74-97-5	Bromochloromethane	ND	330	ug/kg	
75-27-4	Bromodichloromethane	ND	130	ug/kg	
75-25-2	Bromoform	ND	130	ug/kg	
74-83-9	Bromomethane	ND	130	ug/kg	
78-93-3	2-Butanone (MEK)	ND	330	ug/kg	
104-51-8	n-Butylbenzene	ND	330	ug/kg	
135-98-8	sec-Butylbenzene	ND	330	ug/kg	
98-06-6	tert-Butylbenzene	ND	330	ug/kg	
75-15-0	Carbon disulfide	ND	330	ug/kg	
56-23-5	Carbon tetrachloride	ND	130	ug/kg	
108-90-7	Chlorobenzene	ND	130	ug/kg	
75-00-3	Chloroethane	ND	330	ug/kg	
67-66-3	Chloroform	ND	130	ug/kg	
74-87-3	Chloromethane	ND	330	ug/kg	
95-49-8	o-Chlorotoluene	ND	330	ug/kg	
106-43-4	p-Chlorotoluene	ND	330	ug/kg	
108-20-3	Di-Isopropyl ether	ND	130	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	330	ug/kg	
124-48-1	Dibromochloromethane	ND	130	ug/kg	
106-93-4	1,2-Dibromoethane	ND	130	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	130	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	130	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	130	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	130	ug/kg	
75-34-3	1,1-Dichloroethane	ND	130	ug/kg	
107-06-2	1,2-Dichloroethane	ND	130	ug/kg	
75-35-4	1,1-Dichloroethene	ND	130	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	130	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	130	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA110_4-8'	Date Sampled:	11/30/10
Lab Sample ID:	M96225-2	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	83.5
Method:	SW846 8260B		
Project:	Former Energy International Parcel, MA		

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
78-87-5	1,2-Dichloropropane	ND	130	ug/kg	
142-28-9	1,3-Dichloropropane	ND	330	ug/kg	
594-20-7	2,2-Dichloropropane	ND	330	ug/kg	
563-58-6	1,1-Dichloropropene	ND	330	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	130	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	130	ug/kg	
123-91-1	1,4-Dioxane	ND	1700	ug/kg	
60-29-7	Ethyl Ether	ND	330	ug/kg	
100-41-4	Ethylbenzene	ND	130	ug/kg	
87-68-3	Hexachlorobutadiene	ND	330	ug/kg	
591-78-6	2-Hexanone	ND	330	ug/kg	
98-82-8	Isopropylbenzene	ND	330	ug/kg	
99-87-6	p-Isopropyltoluene	ND	330	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	130	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	330	ug/kg	
74-95-3	Methylene bromide	ND	330	ug/kg	
75-09-2	Methylene chloride	ND	130	ug/kg	
91-20-3	Naphthalene	ND	330	ug/kg	
103-65-1	n-Propylbenzene	ND	330	ug/kg	
100-42-5	Styrene	ND	330	ug/kg	
994-05-8	tert-Amyl Methyl Ether	ND	330	ug/kg	
637-92-3	tert-Butyl Ethyl Ether	ND	130	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	330	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	130	ug/kg	
127-18-4	Tetrachloroethene	ND	130	ug/kg	
109-99-9	Tetrahydrofuran	ND	660	ug/kg	
108-88-3	Toluene	ND	330	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	330	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	330	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	130	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	130	ug/kg	
79-01-6	Trichloroethene	ND	130	ug/kg	
75-69-4	Trichlorofluoromethane	ND	130	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	330	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	330	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	330	ug/kg	
75-01-4	Vinyl chloride	ND	130	ug/kg	
	m,p-Xylene	ND	130	ug/kg	
95-47-6	o-Xylene	ND	130	ug/kg	
1330-20-7	Xylene (total)	ND	130	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA110_4-8'**Lab Sample ID:** M96225-2**Matrix:** SO - Soil**Method:** SW846 8260B**Project:** Former Energy International Parcel, MA**Date Sampled:** 11/30/10**Date Received:** 11/30/10**Percent Solids:** 83.5

VOA MCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	110%		70-130%
2037-26-5	Toluene-D8	108%		70-130%
460-00-4	4-Bromofluorobenzene	104%		70-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA110_4-8'	Date Sampled:	11/30/10
Lab Sample ID:	M96225-2	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	83.5
Method:	SW846 8270C SW846 3545		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	S19775.D	1	12/07/10	PR	12/03/10	OP23515	MSS816
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.1 g	1.0 ml
Run #2		

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
65-85-0	Benzoic acid	ND	600	ug/kg	
95-57-8	2-Chlorophenol	ND	300	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	600	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	600	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	600	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1200	ug/kg	
95-48-7	2-Methylphenol	ND	600	ug/kg	
	3&4-Methylphenol	ND	600	ug/kg	
88-75-5	2-Nitrophenol	ND	600	ug/kg	
100-02-7	4-Nitrophenol	ND	1200	ug/kg	
87-86-5	Pentachlorophenol	ND	600	ug/kg	
108-95-2	Phenol	ND	300	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	600	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	600	ug/kg	
83-32-9	Acenaphthene	1040	300	ug/kg	
208-96-8	Acenaphthylene	625	300	ug/kg	
98-86-2	Acetophenone	ND	600	ug/kg	
62-53-3	Aniline	ND	600	ug/kg	
120-12-7	Anthracene	3470	300	ug/kg	
56-55-3	Benzo(a)anthracene	6020	300	ug/kg	
50-32-8	Benzo(a)pyrene	2510	300	ug/kg	
205-99-2	Benzo(b)fluoranthene	3660	300	ug/kg	
191-24-2	Benzo(g,h,i)perylene	1280	300	ug/kg	
207-08-9	Benzo(k)fluoranthene	3470	300	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	300	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	300	ug/kg	
91-58-7	2-Chloronaphthalene	ND	300	ug/kg	
106-47-8	4-Chloroaniline	ND	600	ug/kg	
218-01-9	Chrysene	5900	300	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	300	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	300	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	300	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA110_4-8'	Date Sampled:	11/30/10
Lab Sample ID:	M96225-2	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	83.5
Method:	SW846 8270C SW846 3545		
Project:	Former Energy International Parcel, MA		

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	300	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	300	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	300	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	300	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	600	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	600	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	300	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	942	300	ug/kg	
132-64-9	Dibenzofuran	904	300	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	300	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	300	ug/kg	
84-66-2	Diethyl phthalate	ND	300	ug/kg	
131-11-3	Dimethyl phthalate	ND	300	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	300	ug/kg	
206-44-0	Fluoranthene	10500	300	ug/kg	
86-73-7	Fluorene	1630	300	ug/kg	
118-74-1	Hexachlorobenzene	ND	300	ug/kg	
87-68-3	Hexachlorobutadiene	ND	300	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	600	ug/kg	
67-72-1	Hexachloroethane	ND	300	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	1520	300	ug/kg	
78-59-1	Isophorone	ND	300	ug/kg	
91-57-6	2-Methylnaphthalene	443	300	ug/kg	
91-20-3	Naphthalene	1440	300	ug/kg	
98-95-3	Nitrobenzene	ND	300	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	300	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	300	ug/kg	
85-01-8	Phenanthrene	8360	300	ug/kg	
129-00-0	Pyrene	7950	300	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	300	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	65%		30-130%
4165-62-2	Phenol-d5	66%		30-130%
118-79-6	2,4,6-Tribromophenol	84%		30-130%
4165-60-0	Nitrobenzene-d5	59%		30-130%
321-60-8	2-Fluorobiphenyl	75%		30-130%
1718-51-0	Terphenyl-d14	69%		30-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA110_4-8'		
Lab Sample ID:	M96225-2	Date Sampled:	11/30/10
Matrix:	SO - Soil	Date Received:	11/30/10
Method:	MADEP VPH REV 1.1	Percent Solids:	83.5
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BH17793.D	1	12/06/10	AP	n/a	n/a	GBH926
Run #2 ^a	BH17822.D	1	12/07/10	WS	n/a	n/a	GBH929

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	10.6 g	11.0 ml	100 ul
Run #2	9.39 g	11.0 ml	100 ul

Volatile TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C5- C8 Aliphatics (Unadj.)	ND	7200	ug/kg	
	C9- C12 Aliphatics (Unadj.)	ND	7200	ug/kg	
	C9- C10 Aromatics (Unadj.)	ND	7200	ug/kg	
	C5- C8 Aliphatics	ND	7200	ug/kg	
	C9- C12 Aliphatics	ND	7200	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	70%	62% ^b	70-130%
615-59-8	2,5-Dibromotoluene	66% ^b	56% ^b	70-130%

(a) Confirmation run.

(b) Outside control limits due to possible matrix interference. Confirmed by reanalysis.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA110_4-8'	Date Sampled:	11/30/10
Lab Sample ID:	M96225-2	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	83.5
Method:	MADEP EPH REV 1.1 SW846 3550B		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BI2552.D	1	12/05/10	JD	12/02/10	OP23506	GBI96
Run #2							

	Initial Weight	Final Volume
Run #1	12.0 g	2.0 ml
Run #2		

Extractable TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C11-C22 Aromatics (Unadj.)	183000	20000	ug/kg	
	C9-C18 Aliphatics	27200	10000	ug/kg	
	C19-C36 Aliphatics	106000	10000	ug/kg	
	C11-C22 Aromatics	154000	20000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	98%		40-140%
321-60-8	2-Fluorobiphenyl	103%		40-140%
580-13-2	2-Bromonaphthalene	99%		40-140%
3386-33-2	1-Chlorooctadecane	51%		40-140%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA110_4-8'

Lab Sample ID: M96225-2

Matrix: SO - Soil

Date Sampled: 11/30/10

Date Received: 11/30/10

Percent Solids: 83.5

Project: Former Energy International Parcel, MA

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Antimony	< 0.86	0.86	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Arsenic	14.1	0.86	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Barium	147	4.3	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Beryllium	0.47	0.34	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Cadmium	0.65	0.34	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Chromium	17.5	0.86	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Lead	319	0.86	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Mercury	4.8	0.36	mg/kg	10	12/03/10	12/03/10 PY	SW846 7471A ¹	SW846 7471A ⁴
Nickel	20.6	3.4	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Selenium	0.95	0.86	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Silver	0.73	0.43	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Thallium	< 0.86	0.86	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Vanadium	27.0	0.86	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Zinc	237	1.7	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³

(1) Instrument QC Batch: MA12492

(2) Instrument QC Batch: MA12497

(3) Prep QC Batch: MP16325

(4) Prep QC Batch: MP16331

RL = Reporting Limit

Report of Analysis

Client Sample ID: HA110_4-8'**Lab Sample ID:** M96225-2**Matrix:** SO - Soil**Date Sampled:** 11/30/10**Date Received:** 11/30/10**Percent Solids:** 83.5**Project:** Former Energy International Parcel, MA

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Corrosivity as pH	8.7			1	12/03/10	MA	SW846 CHAP7
Cyanide Reactivity	< 1.8	1.8	mg/kg	1	12/06/10	BF	SW846 CHAP7
Ignitability (Flashpoint)	> 230		Deg. F	1	12/06/10	BF	SW846 1020
Redox Potential Vs H2 ^a	385		mv	1	12/03/10	MC	ASTM D1498-76M
Solids, Percent	83.5		%	1	12/02/10	HS	SM21 2540 B MOD.
Sulfide Reactivity	< 60	60	mg/kg	1	12/06/10	BF	SW846 CHAP7

(a) Analysis requested after recommended holding time.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HA110_4-8'	Date Sampled:	11/30/10
Lab Sample ID:	M96225-2A	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	83.5
Project:	Former Energy International Parcel, MA		

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	0.94	D008	5.0	0.010	mg/l	1	12/09/10	12/09/10 DA	SW846 6010C ²	SW846 3010A ³
Mercury	< 0.00020	D009	0.20	0.00020	mg/l	1	12/09/10	12/09/10 MA	SW846 7470A ¹	SW846 7470A ⁴

- (1) Instrument QC Batch: MA12507
- (2) Instrument QC Batch: MA12508
- (3) Prep QC Batch: MP16354
- (4) Prep QC Batch: MP16357

RL = Reporting Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)

Report of Analysis

Client Sample ID:	HA109_0-4'	Date Sampled:	11/30/10
Lab Sample ID:	M96225-3	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	88.8
Method:	SW846 8260B		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R18632.D	1	12/07/10	GK	n/a	n/a	MSR663
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	9.39 g	10.0 ml	100 ul
Run #2			

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	330	ug/kg	
71-43-2	Benzene	74.5	33	ug/kg	
108-86-1	Bromobenzene	ND	330	ug/kg	
74-97-5	Bromochloromethane	ND	330	ug/kg	
75-27-4	Bromodichloromethane	ND	130	ug/kg	
75-25-2	Bromoform	ND	130	ug/kg	
74-83-9	Bromomethane	ND	130	ug/kg	
78-93-3	2-Butanone (MEK)	ND	330	ug/kg	
104-51-8	n-Butylbenzene	ND	330	ug/kg	
135-98-8	sec-Butylbenzene	ND	330	ug/kg	
98-06-6	tert-Butylbenzene	ND	330	ug/kg	
75-15-0	Carbon disulfide	ND	330	ug/kg	
56-23-5	Carbon tetrachloride	ND	130	ug/kg	
108-90-7	Chlorobenzene	ND	130	ug/kg	
75-00-3	Chloroethane	ND	330	ug/kg	
67-66-3	Chloroform	ND	130	ug/kg	
74-87-3	Chloromethane	ND	330	ug/kg	
95-49-8	o-Chlorotoluene	ND	330	ug/kg	
106-43-4	p-Chlorotoluene	ND	330	ug/kg	
108-20-3	Di-Isopropyl ether	ND	130	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	330	ug/kg	
124-48-1	Dibromochloromethane	ND	130	ug/kg	
106-93-4	1,2-Dibromoethane	ND	130	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	130	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	130	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	130	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	130	ug/kg	
75-34-3	1,1-Dichloroethane	ND	130	ug/kg	
107-06-2	1,2-Dichloroethane	ND	130	ug/kg	
75-35-4	1,1-Dichloroethene	ND	130	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	130	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	130	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA109_0-4'

Lab Sample ID: M96225-3

Date Sampled: 11/30/10

Matrix: SO - Soil

Date Received: 11/30/10

Method: SW846 8260B

Percent Solids: 88.8

Project: Former Energy International Parcel, MA

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
78-87-5	1,2-Dichloropropane	ND	130	ug/kg	
142-28-9	1,3-Dichloropropane	ND	330	ug/kg	
594-20-7	2,2-Dichloropropane	ND	330	ug/kg	
563-58-6	1,1-Dichloropropene	ND	330	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	130	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	130	ug/kg	
123-91-1	1,4-Dioxane	ND	1700	ug/kg	
60-29-7	Ethyl Ether	ND	330	ug/kg	
100-41-4	Ethylbenzene	ND	130	ug/kg	
87-68-3	Hexachlorobutadiene	ND	330	ug/kg	
591-78-6	2-Hexanone	ND	330	ug/kg	
98-82-8	Isopropylbenzene	ND	330	ug/kg	
99-87-6	p-Isopropyltoluene	ND	330	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	130	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	330	ug/kg	
74-95-3	Methylene bromide	ND	330	ug/kg	
75-09-2	Methylene chloride	ND	130	ug/kg	
91-20-3	Naphthalene	2080	330	ug/kg	
103-65-1	n-Propylbenzene	ND	330	ug/kg	
100-42-5	Styrene	ND	330	ug/kg	
994-05-8	tert-Amyl Methyl Ether	ND	330	ug/kg	
637-92-3	tert-Butyl Ethyl Ether	ND	130	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	330	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	130	ug/kg	
127-18-4	Tetrachloroethene	ND	130	ug/kg	
109-99-9	Tetrahydrofuran	ND	660	ug/kg	
108-88-3	Toluene	ND	330	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	330	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	330	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	130	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	130	ug/kg	
79-01-6	Trichloroethene	ND	130	ug/kg	
75-69-4	Trichlorofluoromethane	ND	130	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	330	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	330	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	330	ug/kg	
75-01-4	Vinyl chloride	ND	130	ug/kg	
	m,p-Xylene	ND	130	ug/kg	
95-47-6	o-Xylene	ND	130	ug/kg	
1330-20-7	Xylene (total)	154	130	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA109_0-4'	Date Sampled:	11/30/10
Lab Sample ID:	M96225-3	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	88.8
Method:	SW846 8260B		
Project:	Former Energy International Parcel, MA		

VOA MCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		70-130%
2037-26-5	Toluene-D8	114%		70-130%
460-00-4	4-Bromofluorobenzene	111%		70-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA109_0-4'	Date Sampled:	11/30/10
Lab Sample ID:	M96225-3	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	88.8
Method:	SW846 8270C SW846 3545		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	S19776.D	10	12/07/10	PR	12/03/10	OP23515	MSS816
Run #2							

Run #	Initial Weight	Final Volume
Run #1	21.0 g	1.0 ml
Run #2		

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
65-85-0	Benzoic acid	ND	5400	ug/kg	
95-57-8	2-Chlorophenol	ND	2700	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	5400	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	5400	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	5400	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	11000	ug/kg	
95-48-7	2-Methylphenol	ND	5400	ug/kg	
	3&4-Methylphenol	ND	5400	ug/kg	
88-75-5	2-Nitrophenol	ND	5400	ug/kg	
100-02-7	4-Nitrophenol	ND	11000	ug/kg	
87-86-5	Pentachlorophenol	ND	5400	ug/kg	
108-95-2	Phenol	ND	2700	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	5400	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	5400	ug/kg	
83-32-9	Acenaphthene	5850	2700	ug/kg	
208-96-8	Acenaphthylene	ND	2700	ug/kg	
98-86-2	Acetophenone	ND	5400	ug/kg	
62-53-3	Aniline	ND	5400	ug/kg	
120-12-7	Anthracene	16000	2700	ug/kg	
56-55-3	Benzo(a)anthracene	42700	2700	ug/kg	
50-32-8	Benzo(a)pyrene	27400	2700	ug/kg	
205-99-2	Benzo(b)fluoranthene	20900	2700	ug/kg	
191-24-2	Benzo(g,h,i)perylene	9820	2700	ug/kg	
207-08-9	Benzo(k)fluoranthene	14800	2700	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	2700	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	2700	ug/kg	
91-58-7	2-Chloronaphthalene	ND	2700	ug/kg	
106-47-8	4-Chloroaniline	ND	5400	ug/kg	
218-01-9	Chrysene	50500	2700	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	2700	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	2700	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2700	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA109_0-4'	Date Sampled:	11/30/10
Lab Sample ID:	M96225-3	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	88.8
Method:	SW846 8270C SW846 3545		
Project:	Former Energy International Parcel, MA		

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	2700	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	2700	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	2700	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	2700	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	5400	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	5400	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	2700	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	5730	2700	ug/kg	
132-64-9	Dibenzofuran	ND	2700	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	2700	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	2700	ug/kg	
84-66-2	Diethyl phthalate	ND	2700	ug/kg	
131-11-3	Dimethyl phthalate	ND	2700	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2700	ug/kg	
206-44-0	Fluoranthene	47700	2700	ug/kg	
86-73-7	Fluorene	6230	2700	ug/kg	
118-74-1	Hexachlorobenzene	ND	2700	ug/kg	
87-68-3	Hexachlorobutadiene	ND	2700	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	5400	ug/kg	
67-72-1	Hexachloroethane	ND	2700	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	9810	2700	ug/kg	
78-59-1	Isophorone	ND	2700	ug/kg	
91-57-6	2-Methylnaphthalene	ND	2700	ug/kg	
91-20-3	Naphthalene	ND	2700	ug/kg	
98-95-3	Nitrobenzene	ND	2700	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	2700	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	2700	ug/kg	
85-01-8	Phenanthrene	57700	2700	ug/kg	
129-00-0	Pyrene	55500	2700	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	2700	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	72%		30-130%
4165-62-2	Phenol-d5	70%		30-130%
118-79-6	2,4,6-Tribromophenol	57%		30-130%
4165-60-0	Nitrobenzene-d5	73%		30-130%
321-60-8	2-Fluorobiphenyl	88%		30-130%
1718-51-0	Terphenyl-d14	94%		30-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA109_0-4'	Date Sampled:	11/30/10
Lab Sample ID:	M96225-3	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	88.8
Method:	MADEP VPH REV 1.1		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BH17794.D	1	12/06/10	AP	n/a	n/a	GBH926
Run #2 ^a	BH17821.D	1	12/07/10	WS	n/a	n/a	GBH929

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	9.39 g	11.0 ml	10.0 ul
Run #2	10.6 g	11.0 ml	10.0 ul

Volatile TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C5- C8 Aliphatics (Unadj.)	ND	72000	ug/kg	
	C9- C12 Aliphatics (Unadj.)	ND	72000	ug/kg	
	C9- C10 Aromatics (Unadj.)	ND	72000	ug/kg	
	C5- C8 Aliphatics	ND	72000	ug/kg	
	C9- C12 Aliphatics	ND	72000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	72%	64% ^b	70-130%
615-59-8	2,5-Dibromotoluene	63% ^b	58% ^b	70-130%

(a) Confirmation run.

(b) Outside control limits due to possible matrix interference. Confirmed by reanalysis.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA109_0-4'	Date Sampled:	11/30/10
Lab Sample ID:	M96225-3	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	88.8
Method:	MADEP EPH REV 1.1 SW846 3550B		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BI2553.D	1	12/05/10	JD	12/02/10	OP23506	GBI96
Run #2							

	Initial Weight	Final Volume
Run #1	11.4 g	2.0 ml
Run #2		

Extractable TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C11-C22 Aromatics (Unadj.)	1350000	20000	ug/kg	
	C9-C18 Aliphatics	15400	9900	ug/kg	
	C19-C36 Aliphatics	255000	9900	ug/kg	
	C11-C22 Aromatics	1130000	20000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	318% ^a		40-140%
321-60-8	2-Fluorobiphenyl	88%		40-140%
580-13-2	2-Bromonaphthalene	72%		40-140%
3386-33-2	1-Chlorooctadecane	71%		40-140%

(a) Outside control limits due to possible matrix interference.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA109_0-4'

Lab Sample ID: M96225-3

Matrix: SO - Soil

Date Sampled: 11/30/10

Date Received: 11/30/10

Percent Solids: 88.8

Project: Former Energy International Parcel, MA

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Antimony	< 0.83	0.83	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Arsenic	7.5	0.83	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Barium	106	4.2	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Beryllium	0.48	0.33	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Cadmium	1.5	0.33	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Chromium	14.3	0.83	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Lead	288	0.83	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Mercury	1.2	0.072	mg/kg	2	12/03/10	12/03/10 PY	SW846 7471A ¹	SW846 7471A ⁴
Nickel	12.3	3.3	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Selenium	< 0.83	0.83	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Silver	< 0.42	0.42	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Thallium	< 0.83	0.83	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Vanadium	25.7	0.83	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³
Zinc	267	1.7	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ²	SW846 3050B ³

(1) Instrument QC Batch: MA12492

(2) Instrument QC Batch: MA12497

(3) Prep QC Batch: MP16325

(4) Prep QC Batch: MP16331

RL = Reporting Limit

Report of Analysis

Client Sample ID: HA109_0-4'**Lab Sample ID:** M96225-3**Matrix:** SO - Soil**Project:** Former Energy International Parcel, MA**Date Sampled:** 11/30/10**Date Received:** 11/30/10**Percent Solids:** 88.8

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Corrosivity as pH	10.4			1	12/03/10	MA	SW846 CHAP7
Cyanide Reactivity	< 1.7	1.7	mg/kg	1	12/06/10	BF	SW846 CHAP7
Ignitability (Flashpoint)	> 230		Deg. F	1	12/06/10	BF	SW846 1020
Redox Potential Vs H2 ^a	383		mv	1	12/03/10	MC	ASTM D1498-76M
Solids, Percent	88.8		%	1	12/03/10	HS	SM21 2540 B MOD.
Sulfide Reactivity	< 56	56	mg/kg	1	12/06/10	BF	SW846 CHAP7

(a) Analysis requested after recommended holding time.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HA109_0-4'	Date Sampled:	11/30/10
Lab Sample ID:	M96225-3A	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	88.8
Project:	Former Energy International Parcel, MA		

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	0.012	D008	5.0	0.010	mg/l	1	12/09/10	12/09/10 DA	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA12508
(2) Prep QC Batch: MP16354

RL = Reporting Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)

Report of Analysis

Client Sample ID:	HA109_8-12'	Date Sampled:	11/30/10
Lab Sample ID:	M96225-4	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	83.8
Method:	SW846 8260B		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R18614.D	1	12/07/10	GK	n/a	n/a	MSR663
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	10.8 g	10.0 ml	100 ul
Run #2			

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	320	ug/kg	
71-43-2	Benzene	ND	32	ug/kg	
108-86-1	Bromobenzene	ND	320	ug/kg	
74-97-5	Bromochloromethane	ND	320	ug/kg	
75-27-4	Bromodichloromethane	ND	130	ug/kg	
75-25-2	Bromoform	ND	130	ug/kg	
74-83-9	Bromomethane	ND	130	ug/kg	
78-93-3	2-Butanone (MEK)	ND	320	ug/kg	
104-51-8	n-Butylbenzene	ND	320	ug/kg	
135-98-8	sec-Butylbenzene	ND	320	ug/kg	
98-06-6	tert-Butylbenzene	ND	320	ug/kg	
75-15-0	Carbon disulfide	ND	320	ug/kg	
56-23-5	Carbon tetrachloride	ND	130	ug/kg	
108-90-7	Chlorobenzene	ND	130	ug/kg	
75-00-3	Chloroethane	ND	320	ug/kg	
67-66-3	Chloroform	ND	130	ug/kg	
74-87-3	Chloromethane	ND	320	ug/kg	
95-49-8	o-Chlorotoluene	ND	320	ug/kg	
106-43-4	p-Chlorotoluene	ND	320	ug/kg	
108-20-3	Di-Isopropyl ether	ND	130	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	320	ug/kg	
124-48-1	Dibromochloromethane	ND	130	ug/kg	
106-93-4	1,2-Dibromoethane	ND	130	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	130	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	130	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	130	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	130	ug/kg	
75-34-3	1,1-Dichloroethane	ND	130	ug/kg	
107-06-2	1,2-Dichloroethane	ND	130	ug/kg	
75-35-4	1,1-Dichloroethene	ND	130	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	130	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	130	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA109_8-12'

Lab Sample ID: M96225-4

Date Sampled: 11/30/10

Matrix: SO - Soil

Date Received: 11/30/10

Method: SW846 8260B

Percent Solids: 83.8

Project: Former Energy International Parcel, MA

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
78-87-5	1,2-Dichloropropane	ND	130	ug/kg	
142-28-9	1,3-Dichloropropane	ND	320	ug/kg	
594-20-7	2,2-Dichloropropane	ND	320	ug/kg	
563-58-6	1,1-Dichloropropene	ND	320	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	130	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	130	ug/kg	
123-91-1	1,4-Dioxane	ND	1600	ug/kg	
60-29-7	Ethyl Ether	ND	320	ug/kg	
100-41-4	Ethylbenzene	ND	130	ug/kg	
87-68-3	Hexachlorobutadiene	ND	320	ug/kg	
591-78-6	2-Hexanone	ND	320	ug/kg	
98-82-8	Isopropylbenzene	ND	320	ug/kg	
99-87-6	p-Isopropyltoluene	ND	320	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	130	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	320	ug/kg	
74-95-3	Methylene bromide	ND	320	ug/kg	
75-09-2	Methylene chloride	ND	130	ug/kg	
91-20-3	Naphthalene	1540	320	ug/kg	
103-65-1	n-Propylbenzene	ND	320	ug/kg	
100-42-5	Styrene	ND	320	ug/kg	
994-05-8	tert-Amyl Methyl Ether	ND	320	ug/kg	
637-92-3	tert-Butyl Ethyl Ether	ND	130	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	320	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	130	ug/kg	
127-18-4	Tetrachloroethene	ND	130	ug/kg	
109-99-9	Tetrahydrofuran	ND	650	ug/kg	
108-88-3	Toluene	ND	320	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	320	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	320	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	130	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	130	ug/kg	
79-01-6	Trichloroethene	ND	130	ug/kg	
75-69-4	Trichlorofluoromethane	ND	130	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	320	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	320	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	320	ug/kg	
75-01-4	Vinyl chloride	ND	130	ug/kg	
	m,p-Xylene	ND	130	ug/kg	
95-47-6	o-Xylene	ND	130	ug/kg	
1330-20-7	Xylene (total)	ND	130	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA109_8-12'	Date Sampled:	11/30/10
Lab Sample ID:	M96225-4	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	83.8
Method:	SW846 8260B		
Project:	Former Energy International Parcel, MA		

VOA MCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	112%		70-130%
2037-26-5	Toluene-D8	111%		70-130%
460-00-4	4-Bromofluorobenzene	109%		70-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA109_8-12'	Date Sampled:	11/30/10
Lab Sample ID:	M96225-4	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	83.8
Method:	SW846 8270C SW846 3545		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	S19777.D	1	12/07/10	PR	12/03/10	OP23515	MSS816
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.8 g	1.0 ml
Run #2		

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
65-85-0	Benzoic acid	ND	570	ug/kg	
95-57-8	2-Chlorophenol	ND	290	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	570	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	570	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	570	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1100	ug/kg	
95-48-7	2-Methylphenol	ND	570	ug/kg	
	3&4-Methylphenol	ND	570	ug/kg	
88-75-5	2-Nitrophenol	ND	570	ug/kg	
100-02-7	4-Nitrophenol	ND	1100	ug/kg	
87-86-5	Pentachlorophenol	ND	570	ug/kg	
108-95-2	Phenol	ND	290	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	570	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	570	ug/kg	
83-32-9	Acenaphthene	468	290	ug/kg	
208-96-8	Acenaphthylene	340	290	ug/kg	
98-86-2	Acetophenone	ND	570	ug/kg	
62-53-3	Aniline	ND	570	ug/kg	
120-12-7	Anthracene	1140	290	ug/kg	
56-55-3	Benzo(a)anthracene	2440	290	ug/kg	
50-32-8	Benzo(a)pyrene	1900	290	ug/kg	
205-99-2	Benzo(b)fluoranthene	1930	290	ug/kg	
191-24-2	Benzo(g,h,i)perylene	898	290	ug/kg	
207-08-9	Benzo(k)fluoranthene	1560	290	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	290	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	290	ug/kg	
91-58-7	2-Chloronaphthalene	ND	290	ug/kg	
106-47-8	4-Chloroaniline	ND	570	ug/kg	
218-01-9	Chrysene	2550	290	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	290	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	290	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	290	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA109_8-12'	Date Sampled:	11/30/10
Lab Sample ID:	M96225-4	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	83.8
Method:	SW846 8270C SW846 3545		
Project:	Former Energy International Parcel, MA		

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	290	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	290	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	290	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	290	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	570	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	570	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	290	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	533	290	ug/kg	
132-64-9	Dibenzofuran	474	290	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	290	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	290	ug/kg	
84-66-2	Diethyl phthalate	ND	290	ug/kg	
131-11-3	Dimethyl phthalate	ND	290	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	290	ug/kg	
206-44-0	Fluoranthene	4240	290	ug/kg	
86-73-7	Fluorene	582	290	ug/kg	
118-74-1	Hexachlorobenzene	ND	290	ug/kg	
87-68-3	Hexachlorobutadiene	ND	290	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	570	ug/kg	
67-72-1	Hexachloroethane	ND	290	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	980	290	ug/kg	
78-59-1	Isophorone	ND	290	ug/kg	
91-57-6	2-Methylnaphthalene	565	290	ug/kg	
91-20-3	Naphthalene	942	290	ug/kg	
98-95-3	Nitrobenzene	ND	290	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	290	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	290	ug/kg	
85-01-8	Phenanthrene	3520	290	ug/kg	
129-00-0	Pyrene	3440	290	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	290	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	62%		30-130%
4165-62-2	Phenol-d5	62%		30-130%
118-79-6	2,4,6-Tribromophenol	82%		30-130%
4165-60-0	Nitrobenzene-d5	60%		30-130%
321-60-8	2-Fluorobiphenyl	72%		30-130%
1718-51-0	Terphenyl-d14	69%		30-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA109_8-12'	Date Sampled:	11/30/10
Lab Sample ID:	M96225-4	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	83.8
Method:	MADEP VPH REV 1.1		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BH17795.D	1	12/06/10	AP	n/a	n/a	GBH926
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	10.8 g	11.0 ml	100 ul
Run #2			

Volatile TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C5- C8 Aliphatics (Unadj.)	ND	7000	ug/kg	
	C9- C12 Aliphatics (Unadj.)	ND	7000	ug/kg	
	C9- C10 Aromatics (Unadj.)	ND	7000	ug/kg	
	C5- C8 Aliphatics	ND	7000	ug/kg	
	C9- C12 Aliphatics	ND	7000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	103%		70-130%
615-59-8	2,5-Dibromotoluene	95%		70-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA109_8-12'		
Lab Sample ID:	M96225-4	Date Sampled:	11/30/10
Matrix:	SO - Soil	Date Received:	11/30/10
Method:	MADEP EPH REV 1.1 SW846 3550B	Percent Solids:	83.8
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BI2554.D	1	12/05/10	JD	12/02/10	OP23506	GBI96
Run #2							

	Initial Weight	Final Volume
Run #1	11.4 g	2.0 ml
Run #2		

Extractable TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C11-C22 Aromatics (Unadj.)	168000	21000	ug/kg	
	C9-C18 Aliphatics	24800	11000	ug/kg	
	C19-C36 Aliphatics	107000	11000	ug/kg	
	C11-C22 Aromatics	134000	21000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	80%		40-140%
321-60-8	2-Fluorobiphenyl	98%		40-140%
580-13-2	2-Bromonaphthalene	94%		40-140%
3386-33-2	1-Chlorooctadecane	44%		40-140%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA109_8-12'

Lab Sample ID: M96225-4

Matrix: SO - Soil

Date Sampled: 11/30/10

Date Received: 11/30/10

Percent Solids: 83.8

Project: Former Energy International Parcel, MA

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Antimony	3.3	0.86	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Arsenic	15.5	0.86	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Barium	144	4.3	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Beryllium	0.47	0.35	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Cadmium	1.1	0.35	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Chromium	15.8	0.86	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Lead	689	0.86	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Mercury	10.7	0.69	mg/kg	20	12/07/10	12/08/10 PY	SW846 7471A ²	SW846 7471A ⁴
Nickel	15.4	3.5	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Selenium	1.5	0.86	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Silver	1.0	0.43	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Thallium	< 0.86	0.86	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Vanadium	23.3	0.86	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Zinc	353	1.7	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³

(1) Instrument QC Batch: MA12497

(2) Instrument QC Batch: MA12500

(3) Prep QC Batch: MP16325

(4) Prep QC Batch: MP16345

RL = Reporting Limit

Report of Analysis

Client Sample ID: HA109_8-12'**Lab Sample ID:** M96225-4**Matrix:** SO - Soil**Project:** Former Energy International Parcel, MA**Date Sampled:** 11/30/10**Date Received:** 11/30/10**Percent Solids:** 83.8**General Chemistry**

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Corrosivity as pH	7.6			1	12/03/10	MA	SW846 CHAP7
Cyanide Reactivity	< 1.8	1.8	mg/kg	1	12/06/10	BF	SW846 CHAP7
Ignitability (Flashpoint)	> 230		Deg. F	1	12/06/10	BF	SW846 1020
Redox Potential Vs H2 ^a	407		mv	1	12/03/10	MC	ASTM D1498-76M
Solids, Percent	83.8		%	1	12/03/10	HS	SM21 2540 B MOD.
Sulfide Reactivity	< 60	60	mg/kg	1	12/06/10	BF	SW846 CHAP7

(a) Analysis requested after recommended holding time.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HA109_8-12'	Date Sampled:	11/30/10
Lab Sample ID:	M96225-4A	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	83.8
Project:	Former Energy International Parcel, MA		

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	2.5	D008	5.0	0.010	mg/l	1	12/09/10	12/10/10 DA	SW846 6010C ²	SW846 3010A ³
Mercury	< 0.00020	D009	0.20	0.00020	mg/l	1	12/09/10	12/09/10 MA	SW846 7470A ¹	SW846 7470A ⁴

- (1) Instrument QC Batch: MA12507
- (2) Instrument QC Batch: MA12508
- (3) Prep QC Batch: MP16354
- (4) Prep QC Batch: MP16357

RL = Reporting Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)

Report of Analysis

Client Sample ID:	HA108_0-4'	Date Sampled:	11/30/10
Lab Sample ID:	M96225-5	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	87.4
Method:	SW846 8260B		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R18615.D	1	12/07/10	GK	n/a	n/a	MSR663
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	11.3 g	10.0 ml	100 ul
Run #2			

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	290	ug/kg	
71-43-2	Benzene	31.0	29	ug/kg	
108-86-1	Bromobenzene	ND	290	ug/kg	
74-97-5	Bromochloromethane	ND	290	ug/kg	
75-27-4	Bromodichloromethane	ND	120	ug/kg	
75-25-2	Bromoform	ND	120	ug/kg	
74-83-9	Bromomethane	ND	120	ug/kg	
78-93-3	2-Butanone (MEK)	ND	290	ug/kg	
104-51-8	n-Butylbenzene	ND	290	ug/kg	
135-98-8	sec-Butylbenzene	ND	290	ug/kg	
98-06-6	tert-Butylbenzene	ND	290	ug/kg	
75-15-0	Carbon disulfide	ND	290	ug/kg	
56-23-5	Carbon tetrachloride	ND	120	ug/kg	
108-90-7	Chlorobenzene	ND	120	ug/kg	
75-00-3	Chloroethane	ND	290	ug/kg	
67-66-3	Chloroform	ND	120	ug/kg	
74-87-3	Chloromethane	ND	290	ug/kg	
95-49-8	o-Chlorotoluene	ND	290	ug/kg	
106-43-4	p-Chlorotoluene	ND	290	ug/kg	
108-20-3	Di-Isopropyl ether	ND	120	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	290	ug/kg	
124-48-1	Dibromochloromethane	ND	120	ug/kg	
106-93-4	1,2-Dibromoethane	ND	120	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	120	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	120	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	120	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	120	ug/kg	
75-34-3	1,1-Dichloroethane	ND	120	ug/kg	
107-06-2	1,2-Dichloroethane	ND	120	ug/kg	
75-35-4	1,1-Dichloroethene	ND	120	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	120	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	120	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA108_0-4'	Date Sampled:	11/30/10
Lab Sample ID:	M96225-5	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	87.4
Method:	SW846 8260B		
Project:	Former Energy International Parcel, MA		

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
78-87-5	1,2-Dichloropropane	ND	120	ug/kg	
142-28-9	1,3-Dichloropropane	ND	290	ug/kg	
594-20-7	2,2-Dichloropropane	ND	290	ug/kg	
563-58-6	1,1-Dichloropropene	ND	290	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	120	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	120	ug/kg	
123-91-1	1,4-Dioxane	ND	1400	ug/kg	
60-29-7	Ethyl Ether	ND	290	ug/kg	
100-41-4	Ethylbenzene	ND	120	ug/kg	
87-68-3	Hexachlorobutadiene	ND	290	ug/kg	
591-78-6	2-Hexanone	ND	290	ug/kg	
98-82-8	Isopropylbenzene	ND	290	ug/kg	
99-87-6	p-Isopropyltoluene	ND	290	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	120	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	290	ug/kg	
74-95-3	Methylene bromide	ND	290	ug/kg	
75-09-2	Methylene chloride	ND	120	ug/kg	
91-20-3	Naphthalene	665	290	ug/kg	
103-65-1	n-Propylbenzene	ND	290	ug/kg	
100-42-5	Styrene	ND	290	ug/kg	
994-05-8	tert-Amyl Methyl Ether	ND	290	ug/kg	
637-92-3	tert-Butyl Ethyl Ether	ND	120	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	290	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	120	ug/kg	
127-18-4	Tetrachloroethene	ND	120	ug/kg	
109-99-9	Tetrahydrofuran	ND	580	ug/kg	
108-88-3	Toluene	ND	290	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	290	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	290	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	120	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	120	ug/kg	
79-01-6	Trichloroethene	ND	120	ug/kg	
75-69-4	Trichlorofluoromethane	ND	120	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	290	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	290	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	290	ug/kg	
75-01-4	Vinyl chloride	ND	120	ug/kg	
	m,p-Xylene	ND	120	ug/kg	
95-47-6	o-Xylene	ND	120	ug/kg	
1330-20-7	Xylene (total)	ND	120	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA108_0-4'	Date Sampled:	11/30/10
Lab Sample ID:	M96225-5	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	87.4
Method:	SW846 8260B		
Project:	Former Energy International Parcel, MA		

VOA MCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	111%		70-130%
2037-26-5	Toluene-D8	113%		70-130%
460-00-4	4-Bromofluorobenzene	108%		70-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA108_0-4'	Date Sampled:	11/30/10
Lab Sample ID:	M96225-5	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	87.4
Method:	SW846 8270C SW846 3545		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	S19778.D	1	12/07/10	PR	12/03/10	OP23515	MSS816
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.4 g	1.0 ml
Run #2		

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
65-85-0	Benzoic acid	ND	560	ug/kg	
95-57-8	2-Chlorophenol	ND	280	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	560	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	560	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	560	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1100	ug/kg	
95-48-7	2-Methylphenol	ND	560	ug/kg	
	3&4-Methylphenol	ND	560	ug/kg	
88-75-5	2-Nitrophenol	ND	560	ug/kg	
100-02-7	4-Nitrophenol	ND	1100	ug/kg	
87-86-5	Pentachlorophenol	ND	560	ug/kg	
108-95-2	Phenol	ND	280	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	560	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	560	ug/kg	
83-32-9	Acenaphthene	297	280	ug/kg	
208-96-8	Acenaphthylene	375	280	ug/kg	
98-86-2	Acetophenone	ND	560	ug/kg	
62-53-3	Aniline	ND	560	ug/kg	
120-12-7	Anthracene	996	280	ug/kg	
56-55-3	Benzo(a)anthracene	2620	280	ug/kg	
50-32-8	Benzo(a)pyrene	2160	280	ug/kg	
205-99-2	Benzo(b)fluoranthene	2380	280	ug/kg	
191-24-2	Benzo(g,h,i)perylene	923	280	ug/kg	
207-08-9	Benzo(k)fluoranthene	1910	280	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	280	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	280	ug/kg	
91-58-7	2-Chloronaphthalene	ND	280	ug/kg	
106-47-8	4-Chloroaniline	ND	560	ug/kg	
218-01-9	Chrysene	2780	280	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	280	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	280	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	280	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA108_0-4'	Date Sampled:	11/30/10
Lab Sample ID:	M96225-5	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	87.4
Method:	SW846 8270C SW846 3545		
Project:	Former Energy International Parcel, MA		

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	280	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	280	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	280	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	280	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	560	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	560	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	280	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	438	280	ug/kg	
132-64-9	Dibenzofuran	ND	280	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	280	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	280	ug/kg	
84-66-2	Diethyl phthalate	ND	280	ug/kg	
131-11-3	Dimethyl phthalate	ND	280	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	280	ug/kg	
206-44-0	Fluoranthene	4500	280	ug/kg	
86-73-7	Fluorene	354	280	ug/kg	
118-74-1	Hexachlorobenzene	ND	280	ug/kg	
87-68-3	Hexachlorobutadiene	ND	280	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	560	ug/kg	
67-72-1	Hexachloroethane	ND	280	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	1060	280	ug/kg	
78-59-1	Isophorone	ND	280	ug/kg	
91-57-6	2-Methylnaphthalene	351	280	ug/kg	
91-20-3	Naphthalene	549	280	ug/kg	
98-95-3	Nitrobenzene	ND	280	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	280	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	280	ug/kg	
85-01-8	Phenanthrene	3080	280	ug/kg	
129-00-0	Pyrene	3230	280	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	280	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	66%		30-130%
4165-62-2	Phenol-d5	67%		30-130%
118-79-6	2,4,6-Tribromophenol	83%		30-130%
4165-60-0	Nitrobenzene-d5	66%		30-130%
321-60-8	2-Fluorobiphenyl	76%		30-130%
1718-51-0	Terphenyl-d14	71%		30-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA108_0-4'	Date Sampled:	11/30/10
Lab Sample ID:	M96225-5	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	87.4
Method:	MADEP VPH REV 1.1		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BH17796.D	1	12/06/10	AP	n/a	n/a	GBH926
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	11.3 g	11.0 ml	100 ul
Run #2			

Volatile TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C5- C8 Aliphatics (Unadj.)	ND	6300	ug/kg	
	C9- C12 Aliphatics (Unadj.)	ND	6300	ug/kg	
	C9- C10 Aromatics (Unadj.)	ND	6300	ug/kg	
	C5- C8 Aliphatics	ND	6300	ug/kg	
	C9- C12 Aliphatics	ND	6300	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	92%		70-130%
615-59-8	2,5-Dibromotoluene	84%		70-130%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA108_0-4'		
Lab Sample ID:	M96225-5	Date Sampled:	11/30/10
Matrix:	SO - Soil	Date Received:	11/30/10
Method:	MADEP EPH REV 1.1 SW846 3550B	Percent Solids:	87.4
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BI2555.D	1	12/05/10	JD	12/02/10	OP23506	GBI96
Run #2							

	Initial Weight	Final Volume
Run #1	11.4 g	2.0 ml
Run #2		

Extractable TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C11-C22 Aromatics (Unadj.)	167000	20000	ug/kg	
	C9-C18 Aliphatics	22300	10000	ug/kg	
	C19-C36 Aliphatics	111000	10000	ug/kg	
	C11-C22 Aromatics	135000	20000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	127%		40-140%
321-60-8	2-Fluorobiphenyl	96%		40-140%
580-13-2	2-Bromonaphthalene	78%		40-140%
3386-33-2	1-Chlorooctadecane	66%		40-140%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA108_0-4'

Lab Sample ID: M96225-5

Matrix: SO - Soil

Date Sampled: 11/30/10

Date Received: 11/30/10

Percent Solids: 87.4

Project: Former Energy International Parcel, MA

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analized By	Method	Prep Method
Antimony	0.99	0.86	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Arsenic	8.3	0.86	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Barium	81.4	4.3	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Beryllium	0.47	0.34	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Cadmium	0.57	0.34	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Chromium	15.8	0.86	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Lead	277	0.86	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Mercury	1.1	0.036	mg/kg	1	12/07/10	12/08/10 PY	SW846 7471A ²	SW846 7471A ⁴
Nickel	13.7	3.4	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Selenium	< 0.86	0.86	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Silver	< 0.43	0.43	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Thallium	< 0.86	0.86	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Vanadium	25.6	0.86	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Zinc	188	1.7	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³

(1) Instrument QC Batch: MA12497

(2) Instrument QC Batch: MA12500

(3) Prep QC Batch: MP16325

(4) Prep QC Batch: MP16345

RL = Reporting Limit

Report of Analysis

Client Sample ID: HA108_0-4'**Lab Sample ID:** M96225-5**Matrix:** SO - Soil**Date Sampled:** 11/30/10**Date Received:** 11/30/10**Percent Solids:** 87.4**Project:** Former Energy International Parcel, MA

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Corrosivity as pH	8.0			1	12/03/10	MA	SW846 CHAP7
Cyanide Reactivity	< 1.7	1.7	mg/kg	1	12/06/10	BF	SW846 CHAP7
Ignitability (Flashpoint)	> 230		Deg. F	1	12/06/10	BF	SW846 1020
Redox Potential Vs H2 ^a	425		mv	1	12/03/10	MC	ASTM D1498-76M
Solids, Percent	87.4		%	1	12/03/10	HS	SM21 2540 B MOD.
Sulfide Reactivity	< 57	57	mg/kg	1	12/06/10	BF	SW846 CHAP7

(a) Analysis requested after recommended holding time.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HA108_0-4'	Date Sampled:	11/30/10
Lab Sample ID:	M96225-5A	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	87.4
Project:	Former Energy International Parcel, MA		

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	0.42	D008	5.0	0.010	mg/l	1	12/09/10	12/10/10 DA	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA12508
(2) Prep QC Batch: MP16354

RL = Reporting Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)

Report of Analysis

Client Sample ID:	HA108_4-8'	Date Sampled:	11/30/10
Lab Sample ID:	M96225-6	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	83.3
Method:	SW846 8260B		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R18616.D	1	12/07/10	GK	n/a	n/a	MSR663
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	9.35 g	10.0 ml	100 ul
Run #2			

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	370	ug/kg	
71-43-2	Benzene	ND	37	ug/kg	
108-86-1	Bromobenzene	ND	370	ug/kg	
74-97-5	Bromochloromethane	ND	370	ug/kg	
75-27-4	Bromodichloromethane	ND	150	ug/kg	
75-25-2	Bromoform	ND	150	ug/kg	
74-83-9	Bromomethane	ND	150	ug/kg	
78-93-3	2-Butanone (MEK)	ND	370	ug/kg	
104-51-8	n-Butylbenzene	ND	370	ug/kg	
135-98-8	sec-Butylbenzene	ND	370	ug/kg	
98-06-6	tert-Butylbenzene	ND	370	ug/kg	
75-15-0	Carbon disulfide	ND	370	ug/kg	
56-23-5	Carbon tetrachloride	ND	150	ug/kg	
108-90-7	Chlorobenzene	ND	150	ug/kg	
75-00-3	Chloroethane	ND	370	ug/kg	
67-66-3	Chloroform	ND	150	ug/kg	
74-87-3	Chloromethane	ND	370	ug/kg	
95-49-8	o-Chlorotoluene	ND	370	ug/kg	
106-43-4	p-Chlorotoluene	ND	370	ug/kg	
108-20-3	Di-Isopropyl ether	ND	150	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	370	ug/kg	
124-48-1	Dibromochloromethane	ND	150	ug/kg	
106-93-4	1,2-Dibromoethane	ND	150	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	150	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	150	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	150	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	150	ug/kg	
75-34-3	1,1-Dichloroethane	ND	150	ug/kg	
107-06-2	1,2-Dichloroethane	ND	150	ug/kg	
75-35-4	1,1-Dichloroethene	ND	150	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	150	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	150	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA108_4-8'	Date Sampled:	11/30/10
Lab Sample ID:	M96225-6	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	83.3
Method:	SW846 8260B		
Project:	Former Energy International Parcel, MA		

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
78-87-5	1,2-Dichloropropane	ND	150	ug/kg	
142-28-9	1,3-Dichloropropane	ND	370	ug/kg	
594-20-7	2,2-Dichloropropane	ND	370	ug/kg	
563-58-6	1,1-Dichloropropene	ND	370	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	150	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	150	ug/kg	
123-91-1	1,4-Dioxane	ND	1900	ug/kg	
60-29-7	Ethyl Ether	ND	370	ug/kg	
100-41-4	Ethylbenzene	ND	150	ug/kg	
87-68-3	Hexachlorobutadiene	ND	370	ug/kg	
591-78-6	2-Hexanone	ND	370	ug/kg	
98-82-8	Isopropylbenzene	ND	370	ug/kg	
99-87-6	p-Isopropyltoluene	ND	370	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	150	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	370	ug/kg	
74-95-3	Methylene bromide	ND	370	ug/kg	
75-09-2	Methylene chloride	ND	150	ug/kg	
91-20-3	Naphthalene	ND	370	ug/kg	
103-65-1	n-Propylbenzene	ND	370	ug/kg	
100-42-5	Styrene	ND	370	ug/kg	
994-05-8	tert-Amyl Methyl Ether	ND	370	ug/kg	
637-92-3	tert-Butyl Ethyl Ether	ND	150	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	370	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	150	ug/kg	
127-18-4	Tetrachloroethene	ND	150	ug/kg	
109-99-9	Tetrahydrofuran	ND	740	ug/kg	
108-88-3	Toluene	ND	370	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	370	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	370	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	150	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	150	ug/kg	
79-01-6	Trichloroethene	ND	150	ug/kg	
75-69-4	Trichlorofluoromethane	ND	150	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	370	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	370	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	370	ug/kg	
75-01-4	Vinyl chloride	ND	150	ug/kg	
	m,p-Xylene	ND	150	ug/kg	
95-47-6	o-Xylene	ND	150	ug/kg	
1330-20-7	Xylene (total)	ND	150	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA108_4-8'	Date Sampled:	11/30/10
Lab Sample ID:	M96225-6	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	83.3
Method:	SW846 8260B		
Project:	Former Energy International Parcel, MA		

VOA MCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		70-130%
2037-26-5	Toluene-D8	111%		70-130%
460-00-4	4-Bromofluorobenzene	108%		70-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA108_4-8'	Date Sampled:	11/30/10
Lab Sample ID:	M96225-6	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	83.3
Method:	SW846 8270C SW846 3545		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	S19779.D	1	12/07/10	PR	12/03/10	OP23515	MSS816
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.5 g	1.0 ml
Run #2		

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
65-85-0	Benzoic acid	ND	590	ug/kg	
95-57-8	2-Chlorophenol	ND	290	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	590	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	590	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	590	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1200	ug/kg	
95-48-7	2-Methylphenol	ND	590	ug/kg	
	3&4-Methylphenol	ND	590	ug/kg	
88-75-5	2-Nitrophenol	ND	590	ug/kg	
100-02-7	4-Nitrophenol	ND	1200	ug/kg	
87-86-5	Pentachlorophenol	ND	590	ug/kg	
108-95-2	Phenol	ND	290	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	590	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	590	ug/kg	
83-32-9	Acenaphthene	1040	290	ug/kg	
208-96-8	Acenaphthylene	ND	290	ug/kg	
98-86-2	Acetophenone	ND	590	ug/kg	
62-53-3	Aniline	ND	590	ug/kg	
120-12-7	Anthracene	ND	290	ug/kg	
56-55-3	Benzo(a)anthracene	ND	290	ug/kg	
50-32-8	Benzo(a)pyrene	ND	290	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	290	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	290	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	290	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	290	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	290	ug/kg	
91-58-7	2-Chloronaphthalene	ND	290	ug/kg	
106-47-8	4-Chloroaniline	ND	590	ug/kg	
218-01-9	Chrysene	ND	290	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	290	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	290	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	290	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA108_4-8'	Date Sampled:	11/30/10
Lab Sample ID:	M96225-6	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	83.3
Method:	SW846 8270C SW846 3545		
Project:	Former Energy International Parcel, MA		

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	290	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	290	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	290	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	290	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	590	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	590	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	290	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	290	ug/kg	
132-64-9	Dibenzofuran	ND	290	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	290	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	290	ug/kg	
84-66-2	Diethyl phthalate	ND	290	ug/kg	
131-11-3	Dimethyl phthalate	ND	290	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	290	ug/kg	
206-44-0	Fluoranthene	785	290	ug/kg	
86-73-7	Fluorene	ND	290	ug/kg	
118-74-1	Hexachlorobenzene	ND	290	ug/kg	
87-68-3	Hexachlorobutadiene	ND	290	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	590	ug/kg	
67-72-1	Hexachloroethane	ND	290	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	290	ug/kg	
78-59-1	Isophorone	ND	290	ug/kg	
91-57-6	2-Methylnaphthalene	ND	290	ug/kg	
91-20-3	Naphthalene	563	290	ug/kg	
98-95-3	Nitrobenzene	ND	290	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	290	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	290	ug/kg	
85-01-8	Phenanthrene	832	290	ug/kg	
129-00-0	Pyrene	525	290	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	290	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	59%		30-130%
4165-62-2	Phenol-d5	61%		30-130%
118-79-6	2,4,6-Tribromophenol	72%		30-130%
4165-60-0	Nitrobenzene-d5	50%		30-130%
321-60-8	2-Fluorobiphenyl	64%		30-130%
1718-51-0	Terphenyl-d14	40%		30-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA108_4-8'	Date Sampled:	11/30/10
Lab Sample ID:	M96225-6	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	83.3
Method:	MADEP VPH REV 1.1		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BH17797.D	1	12/06/10	AP	n/a	n/a	GBH926
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	9.35 g	11.0 ml	100 ul
Run #2			

Volatile TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C5- C8 Aliphatics (Unadj.)	ND	8100	ug/kg	
	C9- C12 Aliphatics (Unadj.)	ND	8100	ug/kg	
	C9- C10 Aromatics (Unadj.)	ND	8100	ug/kg	
	C5- C8 Aliphatics	ND	8100	ug/kg	
	C9- C12 Aliphatics	ND	8100	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	100%		70-130%
615-59-8	2,5-Dibromotoluene	93%		70-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA108_4-8'	Date Sampled:	11/30/10
Lab Sample ID:	M96225-6	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	83.3
Method:	MADEP EPH REV 1.1 SW846 3550B		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BI2556.D	1	12/05/10	JD	12/02/10	OP23506	GBI96
Run #2							

	Initial Weight	Final Volume
Run #1	11.3 g	2.0 ml
Run #2		

Extractable TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C11-C22 Aromatics (Unadj.)	57500	21000	ug/kg	
	C9-C18 Aliphatics	13700	11000	ug/kg	
	C19-C36 Aliphatics	ND	11000	ug/kg	
	C11-C22 Aromatics	35800	21000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	56%		40-140%
321-60-8	2-Fluorobiphenyl	110%		40-140%
580-13-2	2-Bromonaphthalene	86%		40-140%
3386-33-2	1-Chlorooctadecane	11% ^a		40-140%

(a) Outside control limits due to possible matrix interference. Confirmed by refractionation.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA108_4-8'**Lab Sample ID:** M96225-6**Date Sampled:** 11/30/10**Matrix:** SO - Soil**Date Received:** 11/30/10**Percent Solids:** 83.3**Project:** Former Energy International Parcel, MA**Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analized By	Method	Prep Method
Antimony	1.3	0.87	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Arsenic	7.5	0.87	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Barium	97.0	4.3	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Beryllium	0.39	0.35	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Cadmium	< 0.35	0.35	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Chromium	7.9	0.87	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Lead	229	0.87	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Mercury	0.59	0.036	mg/kg	1	12/07/10	12/08/10 PY	SW846 7471A ²	SW846 7471A ⁴
Nickel	10.8	3.5	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Selenium	1.4	0.87	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Silver	< 0.43	0.43	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Thallium	< 0.87	0.87	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Vanadium	14.8	0.87	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Zinc	169	1.7	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³

(1) Instrument QC Batch: MA12497

(2) Instrument QC Batch: MA12500

(3) Prep QC Batch: MP16325

(4) Prep QC Batch: MP16345

RL = Reporting Limit

Report of Analysis

Client Sample ID: HA108_4-8'**Lab Sample ID:** M96225-6**Matrix:** SO - Soil**Project:** Former Energy International Parcel, MA**Date Sampled:** 11/30/10**Date Received:** 11/30/10**Percent Solids:** 83.3**General Chemistry**

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Corrosivity as pH	7.8			1	12/03/10	MA	SW846 CHAP7
Cyanide Reactivity	< 1.8	1.8	mg/kg	1	12/06/10	BF	SW846 CHAP7
Ignitability (Flashpoint)	> 230		Deg. F	1	12/06/10	BF	SW846 1020
Redox Potential Vs H2 ^a	427		mv	1	12/03/10	MC	ASTM D1498-76M
Solids, Percent	83.3		%	1	12/03/10	HS	SM21 2540 B MOD.
Sulfide Reactivity	< 60	60	mg/kg	1	12/06/10	BF	SW846 CHAP7

(a) Analysis requested after recommended holding time.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HA108_4-8'	Date Sampled:	11/30/10
Lab Sample ID:	M96225-6A	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	83.3
Project:	Former Energy International Parcel, MA		

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	0.88	D008	5.0	0.010	mg/l	1	12/09/10	12/10/10 DA	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA12508
(2) Prep QC Batch: MP16354

RL = Reporting Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)

Report of Analysis

Client Sample ID:	HA107_0-4'	Date Sampled:	11/30/10
Lab Sample ID:	M96225-7	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	88.4
Method:	SW846 8260B		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R18617.D	1	12/07/10	GK	n/a	n/a	MSR663
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	10.8 g	10.0 ml	100 ul
Run #2			

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	300	ug/kg	
71-43-2	Benzene	31.7	30	ug/kg	
108-86-1	Bromobenzene	ND	300	ug/kg	
74-97-5	Bromochloromethane	ND	300	ug/kg	
75-27-4	Bromodichloromethane	ND	120	ug/kg	
75-25-2	Bromoform	ND	120	ug/kg	
74-83-9	Bromomethane	ND	120	ug/kg	
78-93-3	2-Butanone (MEK)	ND	300	ug/kg	
104-51-8	n-Butylbenzene	ND	300	ug/kg	
135-98-8	sec-Butylbenzene	ND	300	ug/kg	
98-06-6	tert-Butylbenzene	ND	300	ug/kg	
75-15-0	Carbon disulfide	ND	300	ug/kg	
56-23-5	Carbon tetrachloride	ND	120	ug/kg	
108-90-7	Chlorobenzene	ND	120	ug/kg	
75-00-3	Chloroethane	ND	300	ug/kg	
67-66-3	Chloroform	ND	120	ug/kg	
74-87-3	Chloromethane	ND	300	ug/kg	
95-49-8	o-Chlorotoluene	ND	300	ug/kg	
106-43-4	p-Chlorotoluene	ND	300	ug/kg	
108-20-3	Di-Isopropyl ether	ND	120	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	300	ug/kg	
124-48-1	Dibromochloromethane	ND	120	ug/kg	
106-93-4	1,2-Dibromoethane	ND	120	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	120	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	120	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	120	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	120	ug/kg	
75-34-3	1,1-Dichloroethane	ND	120	ug/kg	
107-06-2	1,2-Dichloroethane	ND	120	ug/kg	
75-35-4	1,1-Dichloroethene	ND	120	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	120	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	120	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA107_0-4'	Date Sampled:	11/30/10
Lab Sample ID:	M96225-7	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	88.4
Method:	SW846 8260B		
Project:	Former Energy International Parcel, MA		

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
78-87-5	1,2-Dichloropropane	ND	120	ug/kg	
142-28-9	1,3-Dichloropropane	ND	300	ug/kg	
594-20-7	2,2-Dichloropropane	ND	300	ug/kg	
563-58-6	1,1-Dichloropropene	ND	300	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	120	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	120	ug/kg	
123-91-1	1,4-Dioxane	ND	1500	ug/kg	
60-29-7	Ethyl Ether	ND	300	ug/kg	
100-41-4	Ethylbenzene	ND	120	ug/kg	
87-68-3	Hexachlorobutadiene	ND	300	ug/kg	
591-78-6	2-Hexanone	ND	300	ug/kg	
98-82-8	Isopropylbenzene	ND	300	ug/kg	
99-87-6	p-Isopropyltoluene	ND	300	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	120	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	300	ug/kg	
74-95-3	Methylene bromide	ND	300	ug/kg	
75-09-2	Methylene chloride	ND	120	ug/kg	
91-20-3	Naphthalene	ND	300	ug/kg	
103-65-1	n-Propylbenzene	ND	300	ug/kg	
100-42-5	Styrene	ND	300	ug/kg	
994-05-8	tert-Amyl Methyl Ether	ND	300	ug/kg	
637-92-3	tert-Butyl Ethyl Ether	ND	120	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	300	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	120	ug/kg	
127-18-4	Tetrachloroethene	ND	120	ug/kg	
109-99-9	Tetrahydrofuran	ND	590	ug/kg	
108-88-3	Toluene	ND	300	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	300	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	300	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	120	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	120	ug/kg	
79-01-6	Trichloroethene	ND	120	ug/kg	
75-69-4	Trichlorofluoromethane	ND	120	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	300	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	300	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	300	ug/kg	
75-01-4	Vinyl chloride	ND	120	ug/kg	
	m,p-Xylene	ND	120	ug/kg	
95-47-6	o-Xylene	ND	120	ug/kg	
1330-20-7	Xylene (total)	ND	120	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA107_0-4'	Date Sampled:	11/30/10
Lab Sample ID:	M96225-7	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	88.4
Method:	SW846 8260B		
Project:	Former Energy International Parcel, MA		

VOA MCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		70-130%
2037-26-5	Toluene-D8	108%		70-130%
460-00-4	4-Bromofluorobenzene	107%		70-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA107_0-4'	Date Sampled:	11/30/10
Lab Sample ID:	M96225-7	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	88.4
Method:	SW846 8270C SW846 3545		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	S19780.D	1	12/07/10	PR	12/03/10	OP23515	MSS816
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.3 g	1.0 ml
Run #2		

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
65-85-0	Benzoic acid	ND	560	ug/kg	
95-57-8	2-Chlorophenol	ND	280	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	560	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	560	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	560	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1100	ug/kg	
95-48-7	2-Methylphenol	ND	560	ug/kg	
	3&4-Methylphenol	ND	560	ug/kg	
88-75-5	2-Nitrophenol	ND	560	ug/kg	
100-02-7	4-Nitrophenol	ND	1100	ug/kg	
87-86-5	Pentachlorophenol	ND	560	ug/kg	
108-95-2	Phenol	ND	280	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	560	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	560	ug/kg	
83-32-9	Acenaphthene	472	280	ug/kg	
208-96-8	Acenaphthylene	584	280	ug/kg	
98-86-2	Acetophenone	ND	560	ug/kg	
62-53-3	Aniline	ND	560	ug/kg	
120-12-7	Anthracene	1760	280	ug/kg	
56-55-3	Benzo(a)anthracene	4820	280	ug/kg	
50-32-8	Benzo(a)pyrene	3870	280	ug/kg	
205-99-2	Benzo(b)fluoranthene	4610	280	ug/kg	
191-24-2	Benzo(g,h,i)perylene	1690	280	ug/kg	
207-08-9	Benzo(k)fluoranthene	2970	280	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	280	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	280	ug/kg	
91-58-7	2-Chloronaphthalene	ND	280	ug/kg	
106-47-8	4-Chloroaniline	ND	560	ug/kg	
218-01-9	Chrysene	5060	280	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	280	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	280	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	280	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA107_0-4'	Date Sampled:	11/30/10
Lab Sample ID:	M96225-7	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	88.4
Method:	SW846 8270C SW846 3545		
Project:	Former Energy International Parcel, MA		

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	280	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	280	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	280	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	280	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	560	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	560	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	280	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	834	280	ug/kg	
132-64-9	Dibenzofuran	402	280	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	280	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	280	ug/kg	
84-66-2	Diethyl phthalate	ND	280	ug/kg	
131-11-3	Dimethyl phthalate	ND	280	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	280	ug/kg	
206-44-0	Fluoranthene	8090	280	ug/kg	
86-73-7	Fluorene	595	280	ug/kg	
118-74-1	Hexachlorobenzene	ND	280	ug/kg	
87-68-3	Hexachlorobutadiene	ND	280	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	560	ug/kg	
67-72-1	Hexachloroethane	ND	280	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	1900	280	ug/kg	
78-59-1	Isophorone	ND	280	ug/kg	
91-57-6	2-Methylnaphthalene	417	280	ug/kg	
91-20-3	Naphthalene	675	280	ug/kg	
98-95-3	Nitrobenzene	ND	280	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	280	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	280	ug/kg	
85-01-8	Phenanthrene	5290	280	ug/kg	
129-00-0	Pyrene	5880	280	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	280	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	66%		30-130%
4165-62-2	Phenol-d5	67%		30-130%
118-79-6	2,4,6-Tribromophenol	88%		30-130%
4165-60-0	Nitrobenzene-d5	65%		30-130%
321-60-8	2-Fluorobiphenyl	77%		30-130%
1718-51-0	Terphenyl-d14	72%		30-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA107_0-4'	Date Sampled:	11/30/10
Lab Sample ID:	M96225-7	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	88.4
Method:	MADEP VPH REV 1.1		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BH17823.D	1	12/07/10	WS	n/a	n/a	GBH929
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	10.8 g	11.0 ml	100 ul
Run #2			

Volatile TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C5- C8 Aliphatics (Unadj.)	ND	6400	ug/kg	
	C9- C12 Aliphatics (Unadj.)	ND	6400	ug/kg	
	C9- C10 Aromatics (Unadj.)	ND	6400	ug/kg	
	C5- C8 Aliphatics	ND	6400	ug/kg	
	C9- C12 Aliphatics	ND	6400	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	77%		70-130%
615-59-8	2,5-Dibromotoluene	72%		70-130%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA107_0-4'	Date Sampled:	11/30/10
Lab Sample ID:	M96225-7	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	88.4
Method:	MADEP EPH REV 1.1 SW846 3550B		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BI2557.D	1	12/05/10	JD	12/02/10	OP23506	GBI96
Run #2							

	Initial Weight	Final Volume
Run #1	11.2 g	2.0 ml
Run #2		

Extractable TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C11-C22 Aromatics (Unadj.)	421000	20000	ug/kg	
	C9-C18 Aliphatics	20100	10000	ug/kg	
	C19-C36 Aliphatics	143000	10000	ug/kg	
	C11-C22 Aromatics	294000	20000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	135%		40-140%
321-60-8	2-Fluorobiphenyl	93%		40-140%
580-13-2	2-Bromonaphthalene	61%		40-140%
3386-33-2	1-Chlorooctadecane	76%		40-140%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA107_0-4'

Lab Sample ID: M96225-7

Matrix: SO - Soil

Date Sampled: 11/30/10

Date Received: 11/30/10

Percent Solids: 88.4

Project: Former Energy International Parcel, MA

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Antimony	1.0	0.85	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Arsenic	11.2	0.85	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Barium	108	4.3	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Beryllium	0.50	0.34	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Cadmium	0.45	0.34	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Chromium	21.4	0.85	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Lead	231	0.85	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Mercury	1.4	0.071	mg/kg	2	12/07/10	12/08/10 PY	SW846 7471A ²	SW846 7471A ⁴
Nickel	16.8	3.4	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Selenium	1.3	0.85	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Silver	0.81	0.43	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Thallium	< 0.85	0.85	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Vanadium	27.5	0.85	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Zinc	214	1.7	mg/kg	1	12/01/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³

(1) Instrument QC Batch: MA12497

(2) Instrument QC Batch: MA12500

(3) Prep QC Batch: MP16325

(4) Prep QC Batch: MP16345

RL = Reporting Limit

Report of Analysis

Client Sample ID: HA107_0-4'**Lab Sample ID:** M96225-7**Matrix:** SO - Soil**Date Sampled:** 11/30/10**Date Received:** 11/30/10**Percent Solids:** 88.4**Project:** Former Energy International Parcel, MA

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Corrosivity as pH	7.8			1	12/03/10	MA	SW846 CHAP7
Cyanide Reactivity	< 1.7	1.7	mg/kg	1	12/06/10	BF	SW846 CHAP7
Ignitability (Flashpoint)	> 230		Deg. F	1	12/06/10	BF	SW846 1020
Redox Potential Vs H2 ^a	441		mv	1	12/03/10	MC	ASTM D1498-76M
Solids, Percent	88.4		%	1	12/03/10	HS	SM21 2540 B MOD.
Sulfide Reactivity	< 57	57	mg/kg	1	12/06/10	BF	SW846 CHAP7

(a) Analysis requested after recommended holding time.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HA107_0-4'		
Lab Sample ID:	M96225-7A	Date Sampled:	11/30/10
Matrix:	SO - Soil	Date Received:	11/30/10
		Percent Solids:	88.4
Project:	Former Energy International Parcel, MA		

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	0.15	D008	5.0	0.010	mg/l	1	12/09/10	12/10/10 DA	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA12508
(2) Prep QC Batch: MP16354

RL = Reporting Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)

Report of Analysis

Client Sample ID:	HA107_8-12'	Date Sampled:	11/30/10
Lab Sample ID:	M96225-8	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	73.4
Method:	SW846 8260B		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R18618.D	1	12/07/10	GK	n/a	n/a	MSR663
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	10.8 g	10.0 ml	100 ul
Run #2			

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	410	ug/kg	
71-43-2	Benzene	ND	41	ug/kg	
108-86-1	Bromobenzene	ND	410	ug/kg	
74-97-5	Bromochloromethane	ND	410	ug/kg	
75-27-4	Bromodichloromethane	ND	160	ug/kg	
75-25-2	Bromoform	ND	160	ug/kg	
74-83-9	Bromomethane	ND	160	ug/kg	
78-93-3	2-Butanone (MEK)	ND	410	ug/kg	
104-51-8	n-Butylbenzene	ND	410	ug/kg	
135-98-8	sec-Butylbenzene	ND	410	ug/kg	
98-06-6	tert-Butylbenzene	ND	410	ug/kg	
75-15-0	Carbon disulfide	ND	410	ug/kg	
56-23-5	Carbon tetrachloride	ND	160	ug/kg	
108-90-7	Chlorobenzene	ND	160	ug/kg	
75-00-3	Chloroethane	ND	410	ug/kg	
67-66-3	Chloroform	ND	160	ug/kg	
74-87-3	Chloromethane	ND	410	ug/kg	
95-49-8	o-Chlorotoluene	ND	410	ug/kg	
106-43-4	p-Chlorotoluene	ND	410	ug/kg	
108-20-3	Di-Isopropyl ether	ND	160	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	410	ug/kg	
124-48-1	Dibromochloromethane	ND	160	ug/kg	
106-93-4	1,2-Dibromoethane	ND	160	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	160	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	160	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	160	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	160	ug/kg	
75-34-3	1,1-Dichloroethane	ND	160	ug/kg	
107-06-2	1,2-Dichloroethane	ND	160	ug/kg	
75-35-4	1,1-Dichloroethene	ND	160	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	160	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	160	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA107_8-12'

Lab Sample ID: M96225-8

Date Sampled: 11/30/10

Matrix: SO - Soil

Date Received: 11/30/10

Method: SW846 8260B

Percent Solids: 73.4

Project: Former Energy International Parcel, MA

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
78-87-5	1,2-Dichloropropane	ND	160	ug/kg	
142-28-9	1,3-Dichloropropane	ND	410	ug/kg	
594-20-7	2,2-Dichloropropane	ND	410	ug/kg	
563-58-6	1,1-Dichloropropene	ND	410	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	160	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	160	ug/kg	
123-91-1	1,4-Dioxane	ND	2000	ug/kg	
60-29-7	Ethyl Ether	ND	410	ug/kg	
100-41-4	Ethylbenzene	ND	160	ug/kg	
87-68-3	Hexachlorobutadiene	ND	410	ug/kg	
591-78-6	2-Hexanone	ND	410	ug/kg	
98-82-8	Isopropylbenzene	ND	410	ug/kg	
99-87-6	p-Isopropyltoluene	ND	410	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	160	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	410	ug/kg	
74-95-3	Methylene bromide	ND	410	ug/kg	
75-09-2	Methylene chloride	ND	160	ug/kg	
91-20-3	Naphthalene	1090	410	ug/kg	
103-65-1	n-Propylbenzene	ND	410	ug/kg	
100-42-5	Styrene	ND	410	ug/kg	
994-05-8	tert-Amyl Methyl Ether	ND	410	ug/kg	
637-92-3	tert-Butyl Ethyl Ether	ND	160	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	410	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	160	ug/kg	
127-18-4	Tetrachloroethene	ND	160	ug/kg	
109-99-9	Tetrahydrofuran	ND	810	ug/kg	
108-88-3	Toluene	ND	410	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	410	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	410	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	160	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	160	ug/kg	
79-01-6	Trichloroethene	ND	160	ug/kg	
75-69-4	Trichlorofluoromethane	ND	160	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	410	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	410	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	410	ug/kg	
75-01-4	Vinyl chloride	ND	160	ug/kg	
	m,p-Xylene	ND	160	ug/kg	
95-47-6	o-Xylene	ND	160	ug/kg	
1330-20-7	Xylene (total)	ND	160	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA107_8-12'**Lab Sample ID:** M96225-8**Date Sampled:** 11/30/10**Matrix:** SO - Soil**Date Received:** 11/30/10**Method:** SW846 8260B**Percent Solids:** 73.4**Project:** Former Energy International Parcel, MA

VOA MCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		70-130%
2037-26-5	Toluene-D8	110%		70-130%
460-00-4	4-Bromofluorobenzene	108%		70-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA107_8-12'	Date Sampled:	11/30/10
Lab Sample ID:	M96225-8	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	73.4
Method:	SW846 8270C SW846 3545		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	S19781.D	1	12/07/10	PR	12/03/10	OP23515	MSS816
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.2 g	1.0 ml
Run #2		

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
65-85-0	Benzoic acid	ND	670	ug/kg	
95-57-8	2-Chlorophenol	ND	340	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	670	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	670	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	670	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1300	ug/kg	
95-48-7	2-Methylphenol	ND	670	ug/kg	
	3&4-Methylphenol	727	670	ug/kg	
88-75-5	2-Nitrophenol	ND	670	ug/kg	
100-02-7	4-Nitrophenol	ND	1300	ug/kg	
87-86-5	Pentachlorophenol	ND	670	ug/kg	
108-95-2	Phenol	ND	340	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	670	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	670	ug/kg	
83-32-9	Acenaphthene	3830	340	ug/kg	
208-96-8	Acenaphthylene	471	340	ug/kg	
98-86-2	Acetophenone	ND	670	ug/kg	
62-53-3	Aniline	ND	670	ug/kg	
120-12-7	Anthracene	4020	340	ug/kg	
56-55-3	Benzo(a)anthracene	5400	340	ug/kg	
50-32-8	Benzo(a)pyrene	3260	340	ug/kg	
205-99-2	Benzo(b)fluoranthene	3300	340	ug/kg	
191-24-2	Benzo(g,h,i)perylene	998	340	ug/kg	
207-08-9	Benzo(k)fluoranthene	2590	340	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	340	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	340	ug/kg	
91-58-7	2-Chloronaphthalene	ND	340	ug/kg	
106-47-8	4-Chloroaniline	ND	670	ug/kg	
218-01-9	Chrysene	5550	340	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	340	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	340	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	340	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA107_8-12'	Date Sampled:	11/30/10
Lab Sample ID:	M96225-8	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	73.4
Method:	SW846 8270C SW846 3545		
Project:	Former Energy International Parcel, MA		

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	340	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	340	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	340	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	340	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	670	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	670	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	340	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	542	340	ug/kg	
132-64-9	Dibenzofuran	2010	340	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	340	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	340	ug/kg	
84-66-2	Diethyl phthalate	ND	340	ug/kg	
131-11-3	Dimethyl phthalate	ND	340	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	340	ug/kg	
206-44-0	Fluoranthene	10500	340	ug/kg	
86-73-7	Fluorene	3610	340	ug/kg	
118-74-1	Hexachlorobenzene	ND	340	ug/kg	
87-68-3	Hexachlorobutadiene	ND	340	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	670	ug/kg	
67-72-1	Hexachloroethane	ND	340	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	1150	340	ug/kg	
78-59-1	Isophorone	ND	340	ug/kg	
91-57-6	2-Methylnaphthalene	2010	340	ug/kg	
91-20-3	Naphthalene	5360	340	ug/kg	
98-95-3	Nitrobenzene	ND	340	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	340	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	340	ug/kg	
85-01-8	Phenanthrene	12700	340	ug/kg	
129-00-0	Pyrene	7840	340	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	340	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	61%		30-130%
4165-62-2	Phenol-d5	62%		30-130%
118-79-6	2,4,6-Tribromophenol	77%		30-130%
4165-60-0	Nitrobenzene-d5	56%		30-130%
321-60-8	2-Fluorobiphenyl	70%		30-130%
1718-51-0	Terphenyl-d14	61%		30-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA107_8-12'	Date Sampled:	11/30/10
Lab Sample ID:	M96225-8	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	73.4
Method:	MADEP VPH REV 1.1		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BH17799.D	1	12/07/10	AP	n/a	n/a	GBH926
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	10.8 g	11.0 ml	100 ul
Run #2			

Volatile TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C5- C8 Aliphatics (Unadj.)	ND	8700	ug/kg	
	C9- C12 Aliphatics (Unadj.)	ND	8700	ug/kg	
	C9- C10 Aromatics (Unadj.)	ND	8700	ug/kg	
	C5- C8 Aliphatics	ND	8700	ug/kg	
	C9- C12 Aliphatics	ND	8700	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	121%		70-130%
615-59-8	2,5-Dibromotoluene	110%		70-130%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA107_8-12'	Date Sampled:	11/30/10
Lab Sample ID:	M96225-8	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	73.4
Method:	MADEP EPH REV 1.1 SW846 3550B		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BI2558.D	1	12/05/10	JD	12/02/10	OP23506	GBI96
Run #2							

	Initial Weight	Final Volume
Run #1	11.2 g	2.0 ml
Run #2		

Extractable TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C11-C22 Aromatics (Unadj.)	494000	24000	ug/kg	
	C9-C18 Aliphatics	31500	12000	ug/kg	
	C19-C36 Aliphatics	123000	12000	ug/kg	
	C11-C22 Aromatics	374000	24000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	128%		40-140%
321-60-8	2-Fluorobiphenyl	91%		40-140%
580-13-2	2-Bromonaphthalene	88%		40-140%
3386-33-2	1-Chlorooctadecane	51%		40-140%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA107_8-12'

Lab Sample ID: M96225-8

Matrix: SO - Soil

Date Sampled: 11/30/10

Date Received: 11/30/10

Percent Solids: 73.4

Project: Former Energy International Parcel, MA

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analized By	Method	Prep Method
Antimony	< 1.0	1.0	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Arsenic	7.8	1.0	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Barium	165	5.1	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Beryllium	0.50	0.41	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Cadmium	< 0.41	0.41	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Chromium	20.6	1.0	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Lead	338	1.0	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Mercury	1.8	0.18	mg/kg	5	12/07/10	12/08/10 PY	SW846 7471A ²	SW846 7471A ⁴
Nickel	15.5	4.1	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Selenium	< 1.0	1.0	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Silver	0.77	0.51	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Thallium	< 1.0	1.0	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Vanadium	27.0	1.0	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Zinc	198	2.0	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³

(1) Instrument QC Batch: MA12490

(2) Instrument QC Batch: MA12500

(3) Prep QC Batch: MP16330

(4) Prep QC Batch: MP16345

RL = Reporting Limit

Report of Analysis

Client Sample ID: HA107_8-12'**Lab Sample ID:** M96225-8**Matrix:** SO - Soil**Project:** Former Energy International Parcel, MA**Date Sampled:** 11/30/10**Date Received:** 11/30/10**Percent Solids:** 73.4**General Chemistry**

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Corrosivity as pH	7.7			1	12/03/10	MA	SW846 CHAP7
Cyanide Reactivity	< 2.0	2.0	mg/kg	1	12/06/10	BF	SW846 CHAP7
Ignitability (Flashpoint)	> 230		Deg. F	1	12/06/10	BF	SW846 1020
Redox Potential Vs H2 ^a	426		mv	1	12/03/10	MC	ASTM D1498-76M
Solids, Percent	73.4		%	1	12/02/10	HS	SM21 2540 B MOD.
Sulfide Reactivity	< 68	68	mg/kg	1	12/06/10	BF	SW846 CHAP7

(a) Analysis requested after recommended holding time.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HA107_8-12'	Date Sampled:	11/30/10
Lab Sample ID:	M96225-8A	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	73.4
Project:	Former Energy International Parcel, MA		

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	0.50	D008	5.0	0.010	mg/l	1	12/07/10	12/07/10 DA	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA12502
(2) Prep QC Batch: MP16339

RL = Reporting Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Parameter Certifications (MA)
- Chain of Custody
- MCP Form
- EPH Form
- VPH Form
- Sample Tracking Chronicle

Parameter Certification Exceptions

Job Number: M96225
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

The following parameters included in this report are exceptions to NELAC certification.
The certification status of each is indicated below.

Parameter	CAS#	Method	Mat	Certification Status
tert-Amyl Methyl Ether	994-05-8	SW846 8260B	SO	Certified by SOP MMS105/GC-MS
tert-Butyl Ethyl Ether	637-92-3	SW846 8260B	SO	Certified by SOP MMS105/GC-MS
Di-Isopropyl ether	108-20-3	SW846 8260B	SO	Certified by SOP MMS105/GC-MS
Tetrahydrofuran	109-99-9	SW846 8260B	SO	Certified by SOP MMS105/GC-MS

4.1
4

M96225

HALEY & ALDRICHHaley & Aldrich, Inc.
465 Medford St.,
Suite 2200,
Boston, MA 02129-1400**CHAIN OF CUSTODY RECORD**Phone (617) 886-7400
Fax (617) 886-7600

Page 1 of 1

H&A FILE NO. 06318 LABORATORY ACCUTEST DELIVERY DATE 11/30/10
 PROJECT NAME FORMER ENERVIC INTERNATIONAL PART ADDRESS FLORIAN MARLBOROUGH, MA TURNAROUND TIME 10 DAY
 H&A CONTACT KULLMAN CONTACT K. GIBBENS PROJECT MANAGER C. WORTHY

Sample No.	Date	Time	Depth (ft)	Type	Analysis Requested										Number of Containers	Comments (special instructions, precautions, additional method numbers, etc.)
					① VOA	② AAS	③ MCP	④ PCRs	⑤ UPH	⑥ PAHs	⑦ PCBs	⑧ TPH (spec)	⑨ TCLP	⑩ Bioreactivity		
-1 HA100-0-4'	11/20/10	0800	0-4'	Soil	X	X	X	X	X	X	X	X	X	X	4	Laboratory to use applicable DEP CAM methods, unless otherwise directed. ① WLC 8260 ② SWC 8270 ③ Metals EPA 6010+7470 ④ UPH Carbon Ranges MADEP 04-1 ⑤ EPH Changes MADEP 04-1 ⑥ Waste Characteristics
-2 HA104-8'		0835	1-3'		X	X	X	X	X	X	X	X	X	X	4	
-3 HA109-0-4'		1000	0-4'		X	X	X	X	X	X	X	X	X	X	4	
-4 HA109-8-12'		1055	8-12'		X	X	X	X	X	X	X	X	X	X	4	
-5 HA108-0-4'		1230	0-4'		X	X	X	X	X	X	X	X	X	X	4	
-6 HA108-4-8'		1305	4-8'		X	X	X	X	X	X	X	X	X	X	4	
-7 HA107-0-4'		1410	0-4'		X	X	X	X	X	X	X	X	X	X	4	
-8 HA107-8-12'		1505	8-12'		X	X	X	X	X	X	X	X	X	X	4	
-8.50 HA107-8-12-MS		1510	8-12'				X								1	

Sampled and Relinquished by Sign: <u>[Signature]</u> Print: <u>Wafar Mune</u> Firm: <u>Wafar Mune</u> Date: <u>11/30/10</u> Time: <u>1540</u>		Received by Sign: <u>[Signature]</u> Print: <u>Wafar Mune</u> Firm: <u>Wafar Mune</u> Date: <u>11-30-10</u> Time: <u>1540</u>		LIQUID VOA Vial Amber Glass Plastic Bottle Preservative Volume		Sampling Comments If metals exceed 20x RCRA run TCLP limit If PTCR > 30 mg/kg run hex Cr and other necessary tests.
Relinquished by Sign: <u>[Signature]</u> Print: <u>Wafar Mune</u> Firm: <u>Wafar Mune</u> Date: <u>11-30-10</u> Time: <u>1630</u>		Received by Sign: <u>[Signature]</u> Print: <u>Wafar Mune</u> Firm: <u>Wafar Mune</u> Date: <u>11-30-10</u> Time: <u>1630</u>		SOLID VOA Vial Amber Glass Clear Glass Preservative Volume		
Relinquished by Sign: <u>[Signature]</u> Print: <u>Wafar Mune</u> Firm: <u>Wafar Mune</u> Date: <u>11-30-10</u> Time: <u>1630</u>		Received by Sign: <u>[Signature]</u> Print: <u>Wafar Mune</u> Firm: <u>Wafar Mune</u> Date: <u>11-30-10</u> Time: <u>1630</u>		PRESERVATION KEY A Sample dried C NaOH E H ₂ SO ₄ G Methanol B Sample filtered D HNO ₃ F HCl H Water/NaHSO ₄ (circle)		
Relinquished by Sign: <u>[Signature]</u> Print: <u>Wafar Mune</u> Firm: <u>Wafar Mune</u> Date: <u>11-30-10</u> Time: <u>1630</u>		Received by Sign: <u>[Signature]</u> Print: <u>Wafar Mune</u> Firm: <u>Wafar Mune</u> Date: <u>11-30-10</u> Time: <u>1630</u>		Presumptive Certainty Data Package (Laboratory to use applicable DEP CAM methods)		

If Presumptive Certainty Data Package is needed, initial all sections: The required minimum field QC samples, as designated in BWSC CAM-VII have been or will be collected, as appropriate, to meet the requirements of Presumptive Certainty. Matrix Spike (MS) samples for MCP Metals and/or Cyanide are included and identified herein. This Chain of Custody Record (specify) _____ includes _____ does not include samples defined as Drinking Water Samples. If this Chain of Custody Record identifies samples defined as Drinking Water Samples, Trip Blanks and Field Duplicates are included and identified and analysis of TICs are required, as appropriate. Laboratory should (specify if applicable) _____ analyze		Required Reporting Limits and Data Quality Objectives <input type="checkbox"/> RC-S1 <input type="checkbox"/> S1 <input type="checkbox"/> GW1 <input type="checkbox"/> RC-S2 <input type="checkbox"/> S2 <input type="checkbox"/> GW2 <input type="checkbox"/> RC-GW1 <input type="checkbox"/> S3 <input type="checkbox"/> GW3 <input type="checkbox"/> RC-GW2
---	--	---

WHITE - Laboratory

CANARY - Project Manager

PINK - Haley & Aldrich Laboratory

AUGUST 2008

Form 3003

2.3 °C

M96225: Chain of Custody

Page 1 of 1



Massachusetts Department
of Environmental Protection
Bureau of Waste Site Cleanup

WSC-CAM

Exhibit VII A

July 1, 2010

Revision No. 1

Final

Page 13 of 38

Exhibit VII A-2: MassDEP Analytical Protocol Certification Form

MassDEP Analytical Protocol Certification Form

Laboratory Name: Accutest Laboratories of New England

Project #: M96225

Project Location: Former Energy International Parcel, MA

MADEP RTN

None

This form provides certifications for the following data set: list Laboratory Sample ID Numbers(s)

M96225-1, M96225-1A, M96225-2, M96225-2A, M96225-3, M96225-3A, M96225-4, M96225-4A

M96225-5, M96225-5A, M96225-6, M96225-6A, M96225-7, M96225-7A, M96225-8, M96225-8A, M96225-8AS, M96225-8D, M96225-8S

M96225-8AD,

Test method: Refer to case narrative.

Matrices: Groundwater/Surface Water () Soil/Sediment (X) Drinking Water () Air () Other ()

CAM Protocol (check all that apply below):

8260 VOC (X) CAM IIA	7470/7471 Hg (X) CAM III B	MassDEP VPH (X) CAM IV A	8081 Pesticides () CAM V B	7196 Hex Cr () CAM VI B	Mass DEP APH () CAM IX A
8270 SVOC (X) CAM II B	7010 Metals () CAM III C	MassDEP EPH (X) CAM IV B	8151 Herbicides () CAM V C	8330 Explosives () CAM VIII A	TO-15 VOC () CAM IX B
6010 Metals (X) CAM III A	6020 Metals () CAM III D	8082 PCB () CAM V A	9014 Total Cyanide/PAC CAM VI A	6860 Perchlorate () CAM VIII B	

Affirmative Responses to Questions A Through F are required for "Presumptive Certainty status

A	Were all samples received in a condition consistent with those described on the Chain-of Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/> No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/> No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/> No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/> No
E	VPH, EPH, APH, and TO-15 only: a. VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	Yes Yes	<input type="checkbox"/> <input type="checkbox"/> No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/> No

Responses to questions G, H, and I below is required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/> No ¹
Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data useability and representativeness requirements described in 310 CMR 40.1056(2)(k) and WSC-07-350.				
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/> No ¹
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/> No ¹

All Negative responses must be addressed in an attached Environmental Laboratory case narrative.

I the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Signature:

Position:

Laboratory Director

Printed Name:

Reza Tand

Date:

12/20/2010

MADEP EPH FORM

Matrix	Aqueous <input type="checkbox"/>	Soil <input checked="" type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>	
Aqueous Preservative	N/A <input checked="" type="checkbox"/>	pH <= 2 <input type="checkbox"/>	pH > 2 <input type="checkbox"/>	
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg. C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Rec'd at 2.3 deg C.
Extraction Method	SW846 3550B			
Method for Ranges:	MADEP EPH REV 1.1		Client ID:	HA110_0-4'
Method for Targets:	MADEP EPH REV 1.1		Lab ID:	M96225-1
EPH Surrogate Stds.	Aliphatic: 1-Chlorooctadecane		Date Collected:	11/30/2010
	Aromatic: o-Terphenyl		Date Received:	11/30/2010
EPH Fractionation	2-Fluorobiphenyl		Date Extracted:	12/2/2010
Surrogate Standards.	2-Bromonaphthalene		First Date Run:	12/4/2010
			Last Date Run:	N/A
			% Solids:	87.5
			Low Dilution:	1
			High Dilution:	N/A
Unadjusted Ranges	CAS #	Units	Result	RDL
C11-C22 Aromatics (Unadj.)		ug/kg	527000 ^A	19000

Adjusted Ranges				
C9-C18 Aliphatics	ug/kg	21000 ^A	9700	
C19-C36 Aliphatics	ug/kg	102000 ^A	9700	
C11-C22 Aromatics	ug/kg	351000 ^C	19000	
Surrogate Recoveries			Acceptance Range	
1-Chlorooctadecane	%	70	40-140 %	
o-Terphenyl	%	142 ^E	40-140 %	
2-Fluorobiphenyl	%	73	40-140 %	
2-Bromonaphthalene	%	42	40-140 %	
Footnotes				
A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range				
C Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes				
E Outside control limits due to possible matrix interference.				
Z A 'J' qualifier indicates an estimated value				

Were all QA/QC procedures REQUIRED by the EPH Method followed? ☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved? ☐ Yes ☒ No- Details Attached

Were any significant modifications made to the EPH method, as specified in Sect. 11.3? ☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature 

Postition Laboratory Director

Printed Name Reza Tand

Date 12/20/2010

MADEP EPH FORM

Matrix	Aqueous <input type="checkbox"/>	Soil <input checked="" type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>	
Aqueous Preservative	N/A <input checked="" type="checkbox"/>	pH <= 2 <input type="checkbox"/>	pH > 2 <input type="checkbox"/>	
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg. C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Rec'd at 2.3 deg C.
Extraction Method	SW846 3550B			
Method for Ranges:	MADEP EPH REV 1.1		Client ID: HA110_4-8'	Lab ID: M96225-2
Method for Targets:	MADEP EPH REV 1.1		Date Collected: 11/30/2010	Date Received: 11/30/2010
EPH Surrogate Stds.	Aliphatic: 1-Chlorooctadecane		Date Extracted: 12/2/2010	First Date Run: 12/5/2010
	Aromatic: o-Terphenyl			Last Date Run: N/A
EPH Fractionation	2-Fluorobiphenyl		% Solids: 83.5	Low Dilution: 1
Surrogate Standards.	2-Bromonaphthalene			High Dilution: N/A
Unadjusted Ranges	CAS #	Units	Result	RDL
C11-C22 Aromatics (Unadj.)		ug/kg	183000 ^A	20000

Adjusted Ranges				
C9-C18 Aliphatics	ug/kg	27200 ^A	10000	
C19-C36 Aliphatics	ug/kg	106000 ^A	10000	
C11-C22 Aromatics	ug/kg	154000 ^C	20000	
Surrogate Recoveries		Acceptance Range		
1-Chlorooctadecane	%	51	40-140 %	
o-Terphenyl	%	98	40-140 %	
2-Fluorobiphenyl	%	103	40-140 %	
2-Bromonaphthalene	%	99	40-140 %	
Footnotes				
A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range				
C Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes				
Z A 'J' qualifier indicates an estimated value				

Were all QA/QC procedures REQUIRED by the EPH Method followed? ☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved? ☒ Yes ☐ No- Details Attached

Were any significant modifications made to the EPH method, as specified in Sect. 11.3? ☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature 

Postition Laboratory Director

Printed Name Reza Tand

Date 12/20/2010

MADEP EPH FORM

Matrix	Aqueous <input type="checkbox"/>	Soil <input checked="" type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>	
Aqueous Preservative	N/A <input checked="" type="checkbox"/>	pH <= 2 <input type="checkbox"/>	pH > 2 <input type="checkbox"/>	
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg. C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Rec'd at 2.3 deg C.
Extraction Method	SW846 3550B			
Method for Ranges:	MADEP EPH REV 1.1		Client ID: HA109_0-4'	Lab ID: M96225-3
Method for Targets:	MADEP EPH REV 1.1		Date Collected: 11/30/2010	Date Received: 11/30/2010
EPH Surrogate Stds.	Aliphatic: 1-Chlorooctadecane		Date Extracted: 12/2/2010	First Date Run: 12/5/2010
	Aromatic: o-Terphenyl			Last Date Run: N/A
EPH Fractionation	2-Fluorobiphenyl		% Solids: 88.8	Low Dilution: 1
Surrogate Standards.	2-Bromonaphthalene			High Dilution: N/A
Unadjusted Ranges	CAS #	Units	Result	RDL
C11-C22 Aromatics (Unadj.)		ug/kg	1350000 ^A	20000

Adjusted Ranges

C9-C18 Aliphatics	ug/kg	15400 ^A	9900
C19-C36 Aliphatics	ug/kg	255000 ^A	9900
C11-C22 Aromatics	ug/kg	1130000 ^C	20000

Surrogate Recoveries

			<u>Acceptance Range</u>
1-Chlorooctadecane	%	71	40-140 %
o-Terphenyl	%	318 ^E	40-140 %
2-Fluorobiphenyl	%	88	40-140 %
2-Bromonaphthalene	%	72	40-140 %

Footnotes

- A** Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
- C** Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes
- E** Outside control limits due to possible matrix interference.
- Z** A 'J' qualifier indicates an estimated value

Were all QA/QC procedures REQUIRED by the EPH Method followed?

☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved?

☐ Yes ☒ No- Details Attached

Were any significant modifications made to the EPH method, as specified in Sect. 11.3?

☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature



Postition

Laboratory Director

Printed Name

Reza Tand

Date

12/20/2010

MADEP EPH FORM

Matrix	Aqueous <input type="checkbox"/>	Soil <input checked="" type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>	
Aqueous Preservative	N/A <input checked="" type="checkbox"/>	pH <= 2 <input type="checkbox"/>	pH > 2 <input type="checkbox"/>	
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg. C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Rec'd at 2.3 deg C.
Extraction Method	SW846 3550B			
Method for Ranges:	MADEP EPH REV 1.1		Client ID: HA109_8-12'	Lab ID: M96225-4
Method for Targets:	MADEP EPH REV 1.1		Date Collected: 11/30/2010	Date Received: 11/30/2010
EPH Surrogate Stds.	Aliphatic: 1-Chlorooctadecane		Date Extracted: 12/2/2010	First Date Run: 12/5/2010
	Aromatic: o-Terphenyl			Last Date Run: N/A
EPH Fractionation	2-Fluorobiphenyl		% Solids: 83.8	Low Dilution: 1
Surrogate Standards.	2-Bromonaphthalene			High Dilution: N/A
Unadjusted Ranges	CAS #	Units	Result	RDL
C11-C22 Aromatics (Unadj.)		ug/kg	168000 ^A	21000

Adjusted Ranges				
C9-C18 Aliphatics	ug/kg	24800 ^A	11000	
C19-C36 Aliphatics	ug/kg	107000 ^A	11000	
C11-C22 Aromatics	ug/kg	134000 ^C	21000	
Surrogate Recoveries		Acceptance Range		
1-Chlorooctadecane	%	44	40-140 %	
o-Terphenyl	%	80	40-140 %	
2-Fluorobiphenyl	%	98	40-140 %	
2-Bromonaphthalene	%	94	40-140 %	
Footnotes				
A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range				
C Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes				
Z A 'J' qualifier indicates an estimated value				

Were all QA/QC procedures REQUIRED by the EPH Method followed? ☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved? ☒ Yes ☐ No- Details Attached

Were any significant modifications made to the EPH method, as specified in Sect. 11.3? ☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature

Reza Tand

Postition

Laboratory Director

Printed Name

Reza Tand

Date

12/20/2010

MADEP EPH FORM

Matrix	Aqueous <input type="checkbox"/>	Soil <input checked="" type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>	
Aqueous Preservative	N/A <input checked="" type="checkbox"/>	pH <= 2 <input type="checkbox"/>	pH > 2 <input type="checkbox"/>	
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg. C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Rec'd at 2.3 deg C.
Extraction Method	SW846 3550B			
Method for Ranges:	MADEP EPH REV 1.1		Client ID: HA108_0-4'	Lab ID: M96225-5
Method for Targets:	MADEP EPH REV 1.1		Date Collected: 11/30/2010	Date Received: 11/30/2010
EPH Surrogate Stds.	Aliphatic: 1-Chlorooctadecane		Date Extracted: 12/2/2010	First Date Run: 12/5/2010
	Aromatic: o-Terphenyl			Last Date Run: N/A
EPH Fractionation	2-Fluorobiphenyl		% Solids: 87.4	Low Dilution: 1
Surrogate Standards.	2-Bromonaphthalene			High Dilution: N/A
Unadjusted Ranges	CAS #	Units	Result	RDL
C11-C22 Aromatics (Unadj.)		ug/kg	167000 ^A	20000

Adjusted Ranges				
C9-C18 Aliphatics	ug/kg	22300 ^A	10000	
C19-C36 Aliphatics	ug/kg	111000 ^A	10000	
C11-C22 Aromatics	ug/kg	135000 ^C	20000	
Surrogate Recoveries		Acceptance Range		
1-Chlorooctadecane	%	66	40-140 %	
o-Terphenyl	%	127	40-140 %	
2-Fluorobiphenyl	%	96	40-140 %	
2-Bromonaphthalene	%	78	40-140 %	
Footnotes				
A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range				
C Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes				
Z A 'J' qualifier indicates an estimated value				

Were all QA/QC procedures REQUIRED by the EPH Method followed? ☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved? ☒ Yes ☐ No- Details Attached

Were any significant modifications made to the EPH method, as specified in Sect. 11.3? ☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature

Reza Tand

Postition

Laboratory Director

Printed Name

Reza Tand

Date

12/20/2010

MADEP EPH FORM

Matrix	Aqueous <input type="checkbox"/>	Soil <input checked="" type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>	
Aqueous Preservative	N/A <input checked="" type="checkbox"/>	pH <= 2 <input type="checkbox"/>	pH > 2 <input type="checkbox"/>	
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg. C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Rec'd at 2.3 deg C.
Extraction Method	SW846 3550B			
Method for Ranges:	MADEP EPH REV 1.1		Client ID: HA108_4-8'	Lab ID: M96225-6
Method for Targets:	MADEP EPH REV 1.1		Date Collected: 11/30/2010	Date Received: 11/30/2010
EPH Surrogate Stds.	Aliphatic: 1-Chlorooctadecane		Date Extracted: 12/2/2010	First Date Run: 12/5/2010
	Aromatic: o-Terphenyl			Last Date Run: N/A
EPH Fractionation	2-Fluorobiphenyl		% Solids: 83.3	Low Dilution: 1
Surrogate Standards.	2-Bromonaphthalene			High Dilution: N/A
Unadjusted Ranges	CAS #	Units	Result	RDL
C11-C22 Aromatics (Unadj.)		ug/kg	57500 ^A	21000

Adjusted Ranges

C9-C18 Aliphatics	ug/kg	13700 ^A	11000
C19-C36 Aliphatics	ug/kg	ND ^A	11000
C11-C22 Aromatics	ug/kg	35800 ^C	21000

Surrogate Recoveries

			<u>Acceptance Range</u>
1-Chlorooctadecane	%	11 ^F	40-140 %
o-Terphenyl	%	56	40-140 %
2-Fluorobiphenyl	%	110	40-140 %
2-Bromonaphthalene	%	86	40-140 %

Footnotes

- A** Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
- C** Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes
- F** Outside control limits due to possible matrix interference. Confirmed by refractation.
- Z** A 'J' qualifier indicates an estimated value

Were all QA/QC procedures REQUIRED by the EPH Method followed?

☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved?

☐ Yes ☒ No- Details Attached

Were any significant modifications made to the EPH method, as specified in Sect. 11.3?

☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature



Postition

Laboratory Director

Printed Name

Reza Tand

Date

12/20/2010

MADEP EPH FORM

Matrix	Aqueous <input type="checkbox"/>	Soil <input checked="" type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>	
Aqueous Preservative	N/A <input checked="" type="checkbox"/>	pH <= 2 <input type="checkbox"/>	pH > 2 <input type="checkbox"/>	
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg. C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Rec'd at 2.3 deg C.
Extraction Method	SW846 3550B			
Method for Ranges:	MADEP EPH REV 1.1		Client ID: HA107_0-4'	Lab ID: M96225-7
Method for Targets:	MADEP EPH REV 1.1		Date Collected: 11/30/2010	Date Received: 11/30/2010
EPH Surrogate Stds.	Aliphatic: 1-Chlorooctadecane		Date Extracted: 12/2/2010	First Date Run: 12/5/2010
	Aromatic: o-Terphenyl			Last Date Run: N/A
EPH Fractionation	2-Fluorobiphenyl		% Solids: 88.4	Low Dilution: 1
Surrogate Standards.	2-Bromonaphthalene			High Dilution: N/A
Unadjusted Ranges	CAS #	Units	Result	RDL
C11-C22 Aromatics (Unadj.)		ug/kg	421000 ^A	20000

Adjusted Ranges				
C9-C18 Aliphatics	ug/kg	20100 ^A	10000	
C19-C36 Aliphatics	ug/kg	143000 ^A	10000	
C11-C22 Aromatics	ug/kg	294000 ^C	20000	
Surrogate Recoveries			Acceptance Range	
1-Chlorooctadecane	%	76	40-140 %	
o-Terphenyl	%	135	40-140 %	
2-Fluorobiphenyl	%	93	40-140 %	
2-Bromonaphthalene	%	61	40-140 %	
Footnotes				
A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range				
C Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes				
Z A 'J' qualifier indicates an estimated value				

Were all QA/QC procedures REQUIRED by the EPH Method followed? ☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved? ☒ Yes ☐ No- Details Attached

Were any significant modifications made to the EPH method, as specified in Sect. 11.3? ☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature

Reza Tand

Postition

Laboratory Director

Printed Name

Reza Tand

Date

12/20/2010

MADEP EPH FORM

Matrix	Aqueous <input type="checkbox"/>	Soil <input checked="" type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>	
Aqueous Preservative	N/A <input checked="" type="checkbox"/>	pH <= 2 <input type="checkbox"/>	pH > 2 <input type="checkbox"/>	
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg. C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Rec'd at 2.3 deg C.
Extraction Method	SW846 3550B			
Method for Ranges:	MADEP EPH REV 1.1		Client ID: HA107_8-12'	Lab ID: M96225-8
Method for Targets:	MADEP EPH REV 1.1		Date Collected: 11/30/2010	Date Received: 11/30/2010
EPH Surrogate Stds.	Aliphatic: 1-Chlorooctadecane		Date Extracted: 12/2/2010	First Date Run: 12/5/2010
	Aromatic: o-Terphenyl			Last Date Run: N/A
EPH Fractionation	2-Fluorobiphenyl		% Solids: 73.4	Low Dilution: 1
Surrogate Standards.	2-Bromonaphthalene			High Dilution: N/A
Unadjusted Ranges	CAS #	Units	Result	RDL
C11-C22 Aromatics (Unadj.)		ug/kg	494000 ^A	24000

Adjusted Ranges

C9-C18 Aliphatics	ug/kg	31500 ^A	12000
C19-C36 Aliphatics	ug/kg	123000 ^A	12000
C11-C22 Aromatics	ug/kg	374000 ^C	24000

Surrogate Recoveries

			<u>Acceptance Range</u>
1-Chlorooctadecane	%	51	40-140 %
o-Terphenyl	%	128	40-140 %
2-Fluorobiphenyl	%	91	40-140 %
2-Bromonaphthalene	%	88	40-140 %

Footnotes

- A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
- C Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes
- Z A 'J' qualifier indicates an estimated value

Were all QA/QC procedures REQUIRED by the EPH Method followed?

☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved?

☒ Yes ☐ No- Details Attached

Were any significant modifications made to the EPH method, as specified in Sect. 11.3?

☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature



Postition

Laboratory Director

Printed Name

Reza Tand

Date

12/20/2010

MADEP VPH FORM

Matrix	Aqueous <input type="checkbox"/>	Soil <input checked="" type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>		
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>			
Aqueous Preservatives	N/A <input checked="" type="checkbox"/>	pH <= 2 <input type="checkbox"/>	pH > 2 <input type="checkbox"/>			
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg. C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Rec'd at 2.3 deg C.		
Methanol	Methanol Covering Soil. (mL Methanol/g soil: 1:1 +/- 25%)					
Method for Ranges:	MADEP VPH REV 1.1		Client ID: HA110_0-4	Lab ID: M96225-1		
Method for Target Analytes:	MADEP VPH REV 1.1		Date Collected: 11/30/2010	Date Received: 11/30/2010		
VPH Surrogate Standards			Date Extracted:	First Date Run:		
PID: 2,5-Dibromotoluene			N/A	12/6/2010		
FID: 2,5-Dibromotoluene			% Solids:	Low Dilution:		
			87.5	1		
				High Dilution:		
				N/A		
Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)		N/A	ug/kg	ND ^A	6100	
C9- C10 Aromatics (Unadj.)		N/A	ug/kg	ND ^A	6100	
C9- C12 Aliphatics (Unadj.)		N/A	ug/kg	ND ^A	6100	
Adjusted Ranges						
C5- C8 Aliphatics		N/A	ug/kg	ND ^B	6100	
C9- C12 Aliphatics		N/A	ug/kg	ND ^D	6100	
Surrogate Recoveries					Acceptance Range	
FID:2,5-Dibromotoluene			%	96	70-130 %	
PID:2,5-Dibromotoluene			%	89	70-130 %	
Footnotes						
A	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range					
B	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range.					
D	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C9-C12 aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C9-C10 Aromatic Hydrocarbons.					
Z	A "J" qualifier indicates an estimated value					

Were all QA/QC procedures REQUIRED by the VPH Method followed?

☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved?

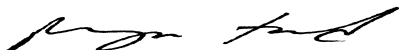
☒ Yes ☐ No- Details Attached

Were any significant modifications made to the VPH method, as specified in Sect. 11.3?

☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature



Postition

Laboratory Director

Printed Name

Reza Tand

Date

12/20/2010

MADEP VPH FORM

Matrix	Aqueous <input type="checkbox"/>	Soil <input checked="" type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>		
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>			
Aqueous Preservatives	N/A <input checked="" type="checkbox"/>	pH <= 2 <input type="checkbox"/>	pH > 2 <input type="checkbox"/>			
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg. C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Rec'd at 2.3 deg C.		
Methanol	Methanol Covering Soil. (mL Methanol/g soil: 1:1 +/- 25%)					
Method for Ranges:	MADEP VPH REV 1.1		Client ID: HA110_4-8'	Lab ID: M96225-2		
Method for Target Analytes:	MADEP VPH REV 1.1		Date Collected: 11/30/2010	Date Received: 11/30/2010		
VPH Surrogate Standards			Date Extracted:	First Date Run:		
PID: 2,5-Dibromotoluene			N/A	12/6/2010		
FID: 2,5-Dibromotoluene			% Solids:	Low Dilution:		
			83.5	1		
				High Dilution:		
				N/A		
Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)		N/A	ug/kg	ND ^A	7200	
C9- C10 Aromatics (Unadj.)		N/A	ug/kg	ND ^A	7200	
C9- C12 Aliphatics (Unadj.)		N/A	ug/kg	ND ^A	7200	
Adjusted Ranges						
C5- C8 Aliphatics		N/A	ug/kg	ND ^B	7200	
C9- C12 Aliphatics		N/A	ug/kg	ND ^D	7200	
Surrogate Recoveries				Acceptance Range		
FID:2,5-Dibromotoluene			%	62 ^G	70-130 %	
PID:2,5-Dibromotoluene			%	56 ^G	70-130 %	
FID:2,5-Dibromotoluene			%	70	70-130 %	
PID:2,5-Dibromotoluene			%	66 ^G	70-130 %	
Footnotes						
A	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range					
B	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range.					
D	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C9-C12 aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C9-C10 Aromatic Hydrocarbons.					
G	Outside control limits due to possible matrix interference. Confirmed by reanalysis.					
Z	A 'J' qualifier indicates an estimated value					

Were all QA/QC procedures REQUIRED by the VPH Method followed?

☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved?

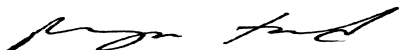
☐ Yes ☒ No- Details Attached

Were any significant modifications made to the VPH method, as specified in Sect. 11.3?

☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature



Postition

Laboratory Director

Printed Name

Reza Tand

Date

12/20/2010

MADEP VPH FORM

Matrix	Aqueous <input type="checkbox"/>	Soil <input checked="" type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>		
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>			
Aqueous Preservatives	N/A <input checked="" type="checkbox"/>	pH <= 2 <input type="checkbox"/>	pH > 2 <input type="checkbox"/>			
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg. C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Rec'd at 2.3 deg C.		
Methanol	Methanol Covering Soil. (mL Methanol/g soil: 1:1 +/- 25%)					
Method for Ranges:	MADEP VPH REV 1.1		Client ID: HA109_0-4	Lab ID: M96225-3		
Method for Target Analytes:	MADEP VPH REV 1.1		Date Collected: 11/30/2010	Date Received: 11/30/2010		
VPH Surrogate Standards			Date Extracted:	First Date Run:		
PID: 2,5-Dibromotoluene			N/A	12/6/2010		
FID: 2,5-Dibromotoluene			% Solids:	Low Dilution:		
			88.8	1		
				High Dilution:		
				N/A		
Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)		N/A	ug/kg	ND ^A	72000	
C9- C10 Aromatics (Unadj.)		N/A	ug/kg	ND ^A	72000	
C9- C12 Aliphatics (Unadj.)		N/A	ug/kg	ND ^A	72000	
Adjusted Ranges						
C5- C8 Aliphatics		N/A	ug/kg	ND ^B	72000	
C9- C12 Aliphatics		N/A	ug/kg	ND ^D	72000	
Surrogate Recoveries					Acceptance Range	
FID:2,5-Dibromotoluene			%	64 ^G	70-130 %	
PID:2,5-Dibromotoluene			%	58 ^G	70-130 %	
FID:2,5-Dibromotoluene			%	72	70-130 %	
PID:2,5-Dibromotoluene			%	63 ^G	70-130 %	
Footnotes						
A	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range					
B	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range.					
D	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C9-C12 aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C9-C10 Aromatic Hydrocarbons.					
G	Outside control limits due to possible matrix interference. Confirmed by reanalysis.					
Z	A 'J' qualifier indicates an estimated value					

Were all QA/QC procedures REQUIRED by the VPH Method followed?

☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved?

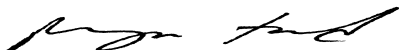
☐ Yes ☒ No- Details Attached

Were any significant modifications made to the VPH method, as specified in Sect. 11.3?

☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature



Postition

Laboratory Director

Printed Name

Reza Tand

Date

12/20/2010

MADEP VPH FORM

Matrix	Aqueous <input type="checkbox"/>	Soil <input checked="" type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>	
Aqueous Preservatives	N/A <input checked="" type="checkbox"/>	pH <= 2 <input type="checkbox"/>	pH > 2 <input type="checkbox"/>	
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg. C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Rec'd at 2.3 deg C.
Methanol	Methanol Covering Soil. (mL Methanol/g soil: 1:1 +/- 25%)			
Method for Ranges:	MADEP VPH REV 1.1		Client ID: HA109_8-12'	Lab ID: M96225-4
Method for Target Analytes:	MADEP VPH REV 1.1		Date Collected: 11/30/2010	Date Received: 11/30/2010
VPH Surrogate Standards			Date Extracted:	First Date Run:
PID: 2,5-Dibromotoluene			N/A	12/6/2010
FID: 2,5-Dibromotoluene			% Solids:	Low Dilution:
			83.8	1
				Last Date Run:
				N/A
				High Dilution:
				N/A

Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)		N/A	ug/kg	ND ^A	7000	
C9- C10 Aromatics (Unadj.)		N/A	ug/kg	ND ^A	7000	
C9- C12 Aliphatics (Unadj.)		N/A	ug/kg	ND ^A	7000	

Adjusted Ranges	Units	Result	RDL
C5- C8 Aliphatics	ug/kg	ND ^B	7000
C9- C12 Aliphatics	ug/kg	ND ^D	7000

Surrogate Recoveries	%	Acceptance Range
FID:2,5-Dibromotoluene	103	70-130 %
PID:2,5-Dibromotoluene	95	70-130 %

Footnotes

A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range

B Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range.

D Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C9-C12 aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C9-C10 Aromatic Hydrocarbons.

Z A 'J' qualifier indicates an estimated value

Were all QA/QC procedures REQUIRED by the VPH Method followed?

☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved?

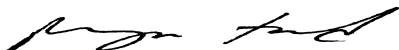
☒ Yes ☐ No- Details Attached

Were any significant modifications made to the VPH method, as specified in Sect. 11.3?

☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature



Postition

Laboratory Director

Printed Name

Reza Tand

Date

12/20/2010

MADEP VPH FORM

Matrix	Aqueous <input type="checkbox"/>	Soil <input checked="" type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>	
Aqueous Preservatives	N/A <input checked="" type="checkbox"/>	pH <= 2 <input type="checkbox"/>	pH > 2 <input type="checkbox"/>	
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg. C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Rec'd at 2.3 deg C.
Methanol	Methanol Covering Soil. (mL Methanol/g soil: 1:1 +/- 25%)			
Method for Ranges:	MADEP VPH REV 1.1		Client ID: HA108_0-4	Lab ID: M96225-5
Method for Target Analytes:	MADEP VPH REV 1.1		Date Collected: 11/30/2010	Date Received: 11/30/2010
VPH Surrogate Standards			Date Extracted:	First Date Run:
PID: 2,5-Dibromotoluene			N/A	12/6/2010
FID: 2,5-Dibromotoluene			% Solids:	Low Dilution:
			87.4	1
				Last Date Run:
				N/A
				High Dilution:
				N/A

Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)		N/A	ug/kg	ND ^A	6300	
C9- C10 Aromatics (Unadj.)		N/A	ug/kg	ND ^A	6300	
C9- C12 Aliphatics (Unadj.)		N/A	ug/kg	ND ^A	6300	

Adjusted Ranges	Units	Result	RDL
C5- C8 Aliphatics	ug/kg	ND ^B	6300
C9- C12 Aliphatics	ug/kg	ND ^D	6300

Surrogate Recoveries	%	Acceptance Range
FID:2,5-Dibromotoluene	92	70-130 %
PID:2,5-Dibromotoluene	84	70-130 %

Footnotes

A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range

B Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range.

D Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C9-C12 aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C9-C10 Aromatic Hydrocarbons.

Z A "J" qualifier indicates an estimated value

Were all QA/QC procedures REQUIRED by the VPH Method followed?

☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved?

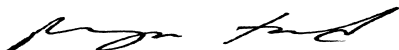
☒ Yes ☐ No- Details Attached

Were any significant modifications made to the VPH method, as specified in Sect. 11.3?

☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature



Postition

Laboratory Director

Printed Name

Reza Tand

Date

12/20/2010

MADEP VPH FORM

Matrix	Aqueous <input type="checkbox"/>	Soil <input checked="" type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>	
Aqueous Preservatives	N/A <input checked="" type="checkbox"/>	pH <= 2 <input type="checkbox"/>	pH > 2 <input type="checkbox"/>	
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg. C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Rec'd at 2.3 deg C.
Methanol	Methanol Covering Soil. (mL Methanol/g soil: 1:1 +/- 25%)			
Method for Ranges:	MADEP VPH REV 1.1		Client ID: HA108_4-8'	Lab ID: M96225-6
Method for Target Analytes:	MADEP VPH REV 1.1		Date Collected: 11/30/2010	Date Received: 11/30/2010
VPH Surrogate Standards			Date Extracted:	First Date Run:
PID: 2,5-Dibromotoluene			N/A	12/6/2010
FID: 2,5-Dibromotoluene			% Solids:	Low Dilution:
			83.3	1
				Last Date Run:
				N/A
				High Dilution:
				N/A

Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)		N/A	ug/kg	ND ^A	8100	
C9- C10 Aromatics (Unadj.)		N/A	ug/kg	ND ^A	8100	
C9- C12 Aliphatics (Unadj.)		N/A	ug/kg	ND ^A	8100	

Adjusted Ranges	Units	Result	RDL
C5- C8 Aliphatics	ug/kg	ND ^B	8100
C9- C12 Aliphatics	ug/kg	ND ^D	8100

Surrogate Recoveries	%	Acceptance Range
FID:2,5-Dibromotoluene	100	70-130 %
PID:2,5-Dibromotoluene	93	70-130 %

Footnotes

A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range

B Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range.

D Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C9-C12 aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C9-C10 Aromatic Hydrocarbons.

Z A 'J' qualifier indicates an estimated value

Were all QA/QC procedures REQUIRED by the VPH Method followed?

☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved?

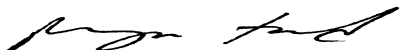
☒ Yes ☐ No- Details Attached

Were any significant modifications made to the VPH method, as specified in Sect. 11.3?

☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature



Postition

Laboratory Director

Printed Name

Reza Tand

Date

12/20/2010

MADEP VPH FORM

Matrix	Aqueous <input type="checkbox"/>	Soil <input checked="" type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>	
Aqueous Preservatives	N/A <input checked="" type="checkbox"/>	pH <= 2 <input type="checkbox"/>	pH > 2 <input type="checkbox"/>	
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg. C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Rec'd at 2.3 deg C.
Methanol	Methanol Covering Soil. (mL Methanol/g soil: 1:1 +/- 25%)			
Method for Ranges:	MADEP VPH REV 1.1		Client ID: HA107_0-4	Lab ID: M96225-7
Method for Target Analytes:	MADEP VPH REV 1.1		Date Collected: 11/30/2010	Date Received: 11/30/2010
VPH Surrogate Standards			Date Extracted:	First Date Run:
PID: 2,5-Dibromotoluene			N/A	12/7/2010
FID: 2,5-Dibromotoluene			% Solids:	Low Dilution:
			88.4	1
				Last Date Run:
				N/A
				High Dilution:
				N/A

Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)		N/A	ug/kg	ND ^A	6400	
C9- C10 Aromatics (Unadj.)		N/A	ug/kg	ND ^A	6400	
C9- C12 Aliphatics (Unadj.)		N/A	ug/kg	ND ^A	6400	

Adjusted Ranges	Units	Result	RDL
C5- C8 Aliphatics	ug/kg	ND ^B	6400
C9- C12 Aliphatics	ug/kg	ND ^D	6400

Surrogate Recoveries	%	Acceptance Range
FID:2,5-Dibromotoluene	77	70-130 %
PID:2,5-Dibromotoluene	72	70-130 %

Footnotes

A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range

B Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range.

D Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C9-C12 aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C9-C10 Aromatic Hydrocarbons.

Z A "J" qualifier indicates an estimated value

Were all QA/QC procedures REQUIRED by the VPH Method followed?

☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved?

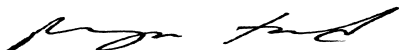
☒ Yes ☐ No- Details Attached

Were any significant modifications made to the VPH method, as specified in Sect. 11.3?

☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature



Postition

Laboratory Director

Printed Name

Reza Tand

Date

12/20/2010

MADEP VPH FORM

Matrix	Aqueous <input type="checkbox"/>	Soil <input checked="" type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>	
Aqueous Preservatives	N/A <input checked="" type="checkbox"/>	pH <= 2 <input type="checkbox"/>	pH > 2 <input type="checkbox"/>	
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg. C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Rec'd at 2.3 deg C.
Methanol	Methanol Covering Soil. (mL Methanol/g soil: 1:1 +/- 25%)			
Method for Ranges:	MADEP VPH REV 1.1		Client ID: HA107_8-12'	Lab ID: M96225-8
Method for Target Analytes:	MADEP VPH REV 1.1		Date Collected: 11/30/2010	Date Received: 11/30/2010
VPH Surrogate Standards			Date Extracted:	First Date Run:
PID: 2,5-Dibromotoluene			N/A	12/7/2010
FID: 2,5-Dibromotoluene			% Solids:	Low Dilution:
			73.4	1
				Last Date Run:
				N/A
				High Dilution:
				N/A

Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)		N/A	ug/kg	ND ^A	8700	
C9- C10 Aromatics (Unadj.)		N/A	ug/kg	ND ^A	8700	
C9- C12 Aliphatics (Unadj.)		N/A	ug/kg	ND ^A	8700	

Adjusted Ranges	Units	Result	RDL
C5- C8 Aliphatics	ug/kg	ND ^B	8700
C9- C12 Aliphatics	ug/kg	ND ^D	8700

Surrogate Recoveries	Acceptance Range
FID:2,5-Dibromotoluene	70-130 %
PID:2,5-Dibromotoluene	70-130 %

Footnotes

A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range

B Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range.

D Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C9-C12 aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C9-C10 Aromatic Hydrocarbons.

Z A 'J' qualifier indicates an estimated value

Were all QA/QC procedures REQUIRED by the VPH Method followed? ☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved? ☒ Yes ☐ No- Details Attached

Were any significant modifications made to the VPH method, as specified in Sect. 11.3? ☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature 
 Printed Name Reza Tand

Postition Laboratory Director
 Date 12/20/2010

Internal Sample Tracking Chronicle

Haley & Aldrich

Job No: M96225

Former Energy International Parcel, MA
Project No: 06318-502

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M96225-1 Collected: 30-NOV-10 08:00 By: MD Received: 30-NOV-10 By: JB HA110_0-4'						
M96225-1	SM21 2540 B MOD.	02-DEC-10	HS			%SOL
M96225-1	ASTM D1498-76M	03-DEC-10	MC			EH
M96225-1	SW846 CHAP7	03-DEC-10	MA			CORR
M96225-1	SW846 7471A	03-DEC-10 16:23	PY	03-DEC-10	EM	HG
M96225-1	MADEP EPH REV 1.1	04-DEC-10 22:50	JD	02-DEC-10	MS	BMAEPHR
M96225-1	SW846 CHAP7	06-DEC-10	BF	06-DEC-10	BF	CREAC,SREAC
M96225-1	SW846 CHAP7	06-DEC-10	BF	06-DEC-10	BF	CREAC,SREAC
M96225-1	SW846 1020	06-DEC-10	BF			IGN
M96225-1	SW846 6010C	06-DEC-10 14:13	DA	01-DEC-10	EM	AG,AS,BA,BE,CD,CR,NI,PB,SB, SE,TL,V,ZN
M96225-1	MADEP VPH REV 1.1	06-DEC-10 20:21	AP			VMAVPHR
M96225-1	SW846 8270C	07-DEC-10 01:48	PR	03-DEC-10	FC	AB8270MCP
M96225-1	SW846 8260B	07-DEC-10 13:59	GK			V8260MCP
M96225-1	SW846 8270C	07-DEC-10 14:17	PR	03-DEC-10	FC	AB8270MCP
M96225-2 Collected: 30-NOV-10 08:35 By: MD Received: 30-NOV-10 By: JB HA110_4-8'						
M96225-2	SM21 2540 B MOD.	02-DEC-10	HS			%SOL
M96225-2	ASTM D1498-76M	03-DEC-10	MC			EH
M96225-2	SW846 CHAP7	03-DEC-10	MA			CORR
M96225-2	SW846 7471A	03-DEC-10 16:26	PY	03-DEC-10	EM	HG
M96225-2	MADEP EPH REV 1.1	05-DEC-10 00:03	JD	02-DEC-10	MS	BMAEPHR
M96225-2	SW846 CHAP7	06-DEC-10	BF	06-DEC-10	BF	CREAC,SREAC
M96225-2	SW846 1020	06-DEC-10	BF			IGN
M96225-2	SW846 CHAP7	06-DEC-10	BF	06-DEC-10	BF	CREAC,SREAC
M96225-2	SW846 6010C	06-DEC-10 14:17	DA	01-DEC-10	EM	AG,AS,BA,BE,CD,CR,NI,PB,SB, SE,TL,V,ZN
M96225-2	MADEP VPH REV 1.1	06-DEC-10 21:01	AP			VMAVPHR
M96225-2	SW846 8270C	07-DEC-10 02:16	PR	03-DEC-10	FC	AB8270MCP
M96225-2	SW846 8260B	07-DEC-10 14:26	GK			V8260MCP
M96225-2	MADEP VPH REV 1.1	07-DEC-10 20:25	WS			VMAVPHR
M96225-3 Collected: 30-NOV-10 10:00 By: MD Received: 30-NOV-10 By: JB HA109_0-4'						
M96225-3	ASTM D1498-76M	03-DEC-10	MC			EH

Internal Sample Tracking Chronicle

Haley & Aldrich

Job No: M96225

Former Energy International Parcel, MA
Project No: 06318-502

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M96225-3	SM21 2540 B MOD.	03-DEC-10	HS			%SOL
M96225-3	SW846 CHAP7	03-DEC-10	MA			CORR
M96225-3	SW846 7471A	03-DEC-10 16:32	PY	03-DEC-10	EM	HG
M96225-3	MADEP EPH REV 1.1	05-DEC-10 00:39	JD	02-DEC-10	MS	BMAEPHR
M96225-3	SW846 CHAP7	06-DEC-10	BF	06-DEC-10	BF	CREAC,SREAC
M96225-3	SW846 CHAP7	06-DEC-10	BF	06-DEC-10	BF	CREAC,SREAC
M96225-3	SW846 1020	06-DEC-10	BF			IGN
M96225-3	SW846 6010C	06-DEC-10 14:21	DA	01-DEC-10	EM	AG,AS,BA,BE,CD,CR,NI,PB,SB, SE,TL,V,ZN
M96225-3	MADEP VPH REV 1.1	06-DEC-10 21:40	AP			VMAVPHR
M96225-3	SW846 8270C	07-DEC-10 02:45	PR	03-DEC-10	FC	AB8270MCP
M96225-3	MADEP VPH REV 1.1	07-DEC-10 19:46	WS			VMAVPHR
M96225-3	SW846 8260B	07-DEC-10 23:04	GK			V8260MCP
M96225-4 Collected: 30-NOV-10 10:55 By: MD Received: 30-NOV-10 By: JB HA109_8-12'						
M96225-4	ASTM D1498-76M	03-DEC-10	MC			EH
M96225-4	SM21 2540 B MOD.	03-DEC-10	HS			%SOL
M96225-4	SW846 CHAP7	03-DEC-10	MA			CORR
M96225-4	MADEP EPH REV 1.1	05-DEC-10 01:16	JD	02-DEC-10	MS	BMAEPHR
M96225-4	SW846 CHAP7	06-DEC-10	BF	06-DEC-10	BF	CREAC,SREAC
M96225-4	SW846 CHAP7	06-DEC-10	BF	06-DEC-10	BF	CREAC,SREAC
M96225-4	SW846 1020	06-DEC-10	BF			IGN
M96225-4	SW846 6010C	06-DEC-10 14:56	DA	01-DEC-10	EM	AG,AS,BA,BE,CD,CR,NI,PB,SB, SE,TL,V,ZN
M96225-4	MADEP VPH REV 1.1	06-DEC-10 22:20	AP			VMAVPHR
M96225-4	SW846 8270C	07-DEC-10 03:14	PR	03-DEC-10	FC	AB8270MCP
M96225-4	SW846 8260B	07-DEC-10 14:53	GK			V8260MCP
M96225-4	SW846 7471A	08-DEC-10 13:59	PY	07-DEC-10	EM	HG
M96225-5 Collected: 30-NOV-10 12:30 By: MD Received: 30-NOV-10 By: JB HA108_0-4'						
M96225-5	ASTM D1498-76M	03-DEC-10	MC			EH
M96225-5	SM21 2540 B MOD.	03-DEC-10	HS			%SOL
M96225-5	SW846 CHAP7	03-DEC-10	MA			CORR
M96225-5	MADEP EPH REV 1.1	05-DEC-10 01:52	JD	02-DEC-10	MS	BMAEPHR
M96225-5	SW846 CHAP7	06-DEC-10	BF	06-DEC-10	BF	CREAC,SREAC
M96225-5	SW846 CHAP7	06-DEC-10	BF	06-DEC-10	BF	CREAC,SREAC

Internal Sample Tracking Chronicle

Haley & Aldrich

Job No: M96225

Former Energy International Parcel, MA
Project No: 06318-502

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M96225-5	SW846 1020	06-DEC-10	BF			IGN
M96225-5	SW846 6010C	06-DEC-10 14:52	DA	01-DEC-10	EM	AG,AS,BA,BE,CD,CR,NI,PB,SB,SE,TL,V,ZN
M96225-5	MADEP VPH REV 1.1	06-DEC-10 23:00	AP			VMAVPHR
M96225-5	SW846 8270C	07-DEC-10 03:42	PR	03-DEC-10	FC	AB8270MCP
M96225-5	SW846 8260B	07-DEC-10 15:20	GK			V8260MCP
M96225-5	SW846 7471A	08-DEC-10 13:14	PY	07-DEC-10	EM	HG
M96225-6 Collected: 30-NOV-10 13:05 By: MD Received: 30-NOV-10 By: JB HA108_4-8'						
M96225-6	ASTM D1498-76M	03-DEC-10	MC			EH
M96225-6	SM21 2540 B MOD.	03-DEC-10	HS			% SOL
M96225-6	SW846 CHAP7	03-DEC-10	MA			CORR
M96225-6	MADEP EPH REV 1.1	05-DEC-10 02:28	JD	02-DEC-10	MS	BMAEPHR
M96225-6	SW846 CHAP7	06-DEC-10	BF	06-DEC-10	BF	CREAC,SREAC
M96225-6	SW846 CHAP7	06-DEC-10	BF	06-DEC-10	BF	CREAC,SREAC
M96225-6	SW846 1020	06-DEC-10	BF			IGN
M96225-6	SW846 6010C	06-DEC-10 14:41	DA	01-DEC-10	EM	AG,AS,BA,BE,CD,CR,NI,PB,SB,SE,TL,V,ZN
M96225-6	MADEP VPH REV 1.1	06-DEC-10 23:40	AP			VMAVPHR
M96225-6	SW846 8270C	07-DEC-10 04:11	PR	03-DEC-10	FC	AB8270MCP
M96225-6	SW846 8260B	07-DEC-10 15:47	GK			V8260MCP
M96225-6	SW846 7471A	08-DEC-10 13:18	PY	07-DEC-10	EM	HG
M96225-7 Collected: 30-NOV-10 14:10 By: MD Received: 30-NOV-10 By: JB HA107_0-4'						
M96225-7	ASTM D1498-76M	03-DEC-10	MC			EH
M96225-7	SM21 2540 B MOD.	03-DEC-10	HS			% SOL
M96225-7	SW846 CHAP7	03-DEC-10	MA			CORR
M96225-7	MADEP EPH REV 1.1	05-DEC-10 03:04	JD	02-DEC-10	MS	BMAEPHR
M96225-7	SW846 CHAP7	06-DEC-10	BF	06-DEC-10	BF	CREAC,SREAC
M96225-7	SW846 CHAP7	06-DEC-10	BF	06-DEC-10	BF	CREAC,SREAC
M96225-7	SW846 1020	06-DEC-10	BF			IGN
M96225-7	SW846 6010C	06-DEC-10 14:48	DA	01-DEC-10	EM	AG,AS,BA,BE,CD,CR,NI,PB,SB,SE,TL,V,ZN
M96225-7	SW846 8270C	07-DEC-10 04:40	PR	03-DEC-10	FC	AB8270MCP
M96225-7	SW846 8260B	07-DEC-10 16:14	GK			V8260MCP
M96225-7	MADEP VPH REV 1.1	07-DEC-10 21:05	WS			VMAVPHR

Internal Sample Tracking Chronicle

Haley & Aldrich

Job No: M96225

Former Energy International Parcel, MA
Project No: 06318-502

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M96225-7	SW846 7471A	08-DEC-10 14:02	PY	07-DEC-10	EM	HG
M96225-8 Collected: 30-NOV-10 15:05 By: MD Received: 30-NOV-10 By: JB HA107_8-12'						
M96225-8	SM21 2540 B MOD.	02-DEC-10	HS			%SOL
M96225-8	SW846 6010C	02-DEC-10 21:44	DA	02-DEC-10	EM	AG,AS,BA,BE,CD,CR,NI,PB,SB,SE,TL,V,ZN
M96225-8	ASTM D1498-76M	03-DEC-10	MC			EH
M96225-8	SW846 CHAP7	03-DEC-10	MA			CORR
M96225-8	MADEP EPH REV 1.1	05-DEC-10 03:41	JD	02-DEC-10	MS	BMAEPHR
M96225-8	SW846 CHAP7	06-DEC-10	BF	06-DEC-10	BF	CREAC,SREAC
M96225-8	SW846 CHAP7	06-DEC-10	BF	06-DEC-10	BF	CREAC,SREAC
M96225-8	SW846 1020	06-DEC-10	BF			IGN
M96225-8	MADEP VPH REV 1.1	07-DEC-10 00:59	AP			VMAVPHR
M96225-8	SW846 8270C	07-DEC-10 05:08	PR	03-DEC-10	FC	AB8270MCP
M96225-8	SW846 8260B	07-DEC-10 16:40	GK			V8260MCP
M96225-8	SW846 7471A	08-DEC-10 13:57	PY	07-DEC-10	EM	HG
M96225-1A Collected: 30-NOV-10 08:00 By: MD Received: 30-NOV-10 By: JB HA110_0-4'						
M96225-1A	SW846 6010C	09-DEC-10 23:49	DA	09-DEC-10	EM	EPB
M96225-2A Collected: 30-NOV-10 08:35 By: MD Received: 30-NOV-10 By: JB HA110_4-8'						
M96225-2A	SW846 7470A	09-DEC-10 13:56	MA	09-DEC-10	MA	EHG
M96225-2A	SW846 6010C	09-DEC-10 23:54	DA	09-DEC-10	EM	EPB
M96225-3A Collected: 30-NOV-10 10:00 By: MD Received: 30-NOV-10 By: JB HA109_0-4'						
M96225-3A	SW846 6010C	09-DEC-10 23:58	DA	09-DEC-10	EM	EPB
M96225-4A Collected: 30-NOV-10 10:55 By: MD Received: 30-NOV-10 By: JB HA109_8-12'						
M96225-4A	SW846 7470A	09-DEC-10 13:58	MA	09-DEC-10	MA	EHG
M96225-4A	SW846 6010C	10-DEC-10 00:03	DA	09-DEC-10	EM	EPB

Internal Sample Tracking Chronicle

Haley & Aldrich

Job No: M96225

Former Energy International Parcel, MA
Project No: 06318-502

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M96225-5A Collected: 30-NOV-10 12:30 By: MD Received: 30-NOV-10 By: JB HA108_0-4'						
M96225-5A	SW846 6010C	10-DEC-10 00:07	DA	09-DEC-10	EM	EPB
M96225-6A Collected: 30-NOV-10 13:05 By: MD Received: 30-NOV-10 By: JB HA108_4-8'						
M96225-6A	SW846 6010C	10-DEC-10 00:21	DA	09-DEC-10	EM	EPB
M96225-7A Collected: 30-NOV-10 14:10 By: MD Received: 30-NOV-10 By: JB HA107_0-4'						
M96225-7A	SW846 6010C	10-DEC-10 00:25	DA	09-DEC-10	EM	EPB
M96225-8A Collected: 30-NOV-10 15:05 By: MD Received: 30-NOV-10 By: JB HA107_8-12'						
M96225-8A	SW846 6010C	07-DEC-10 21:15	DA	07-DEC-10	EM	EPB

GC/MS Volatiles

5

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Page 1 of 3

Job Number: M96225
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSR663-MB	R18611A.D	1	12/07/10	GK	n/a	n/a	MSR663

The QC reported here applies to the following samples:

Method: SW846 8260B

M96225-1, M96225-2, M96225-3, M96225-4, M96225-5, M96225-6, M96225-7, M96225-8

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	250	ug/kg	
71-43-2	Benzene	ND	25	ug/kg	
108-86-1	Bromobenzene	ND	250	ug/kg	
74-97-5	Bromochloromethane	ND	250	ug/kg	
75-27-4	Bromodichloromethane	ND	100	ug/kg	
75-25-2	Bromoform	ND	100	ug/kg	
74-83-9	Bromomethane	ND	100	ug/kg	
78-93-3	2-Butanone (MEK)	ND	250	ug/kg	
104-51-8	n-Butylbenzene	ND	250	ug/kg	
135-98-8	sec-Butylbenzene	ND	250	ug/kg	
98-06-6	tert-Butylbenzene	ND	250	ug/kg	
75-15-0	Carbon disulfide	ND	250	ug/kg	
56-23-5	Carbon tetrachloride	ND	100	ug/kg	
108-90-7	Chlorobenzene	ND	100	ug/kg	
75-00-3	Chloroethane	ND	250	ug/kg	
67-66-3	Chloroform	ND	100	ug/kg	
74-87-3	Chloromethane	ND	250	ug/kg	
95-49-8	o-Chlorotoluene	ND	250	ug/kg	
106-43-4	p-Chlorotoluene	ND	250	ug/kg	
108-20-3	Di-Isopropyl ether	ND	100	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	250	ug/kg	
124-48-1	Dibromochloromethane	ND	100	ug/kg	
106-93-4	1,2-Dibromoethane	ND	100	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	100	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	100	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	100	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	100	ug/kg	
75-34-3	1,1-Dichloroethane	ND	100	ug/kg	
107-06-2	1,2-Dichloroethane	ND	100	ug/kg	
75-35-4	1,1-Dichloroethene	ND	100	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	100	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	100	ug/kg	
78-87-5	1,2-Dichloropropane	ND	100	ug/kg	
142-28-9	1,3-Dichloropropane	ND	250	ug/kg	
594-20-7	2,2-Dichloropropane	ND	250	ug/kg	
563-58-6	1,1-Dichloropropene	ND	250	ug/kg	

Method Blank Summary

Page 2 of 3

Job Number: M96225
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSR663-MB	R18611A.D	1	12/07/10	GK	n/a	n/a	MSR663

The QC reported here applies to the following samples:

Method: SW846 8260B

M96225-1, M96225-2, M96225-3, M96225-4, M96225-5, M96225-6, M96225-7, M96225-8

CAS No.	Compound	Result	RL	Units	Q
10061-01-5	cis-1,3-Dichloropropene	ND	100	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	100	ug/kg	
123-91-1	1,4-Dioxane	ND	1300	ug/kg	
60-29-7	Ethyl Ether	ND	250	ug/kg	
100-41-4	Ethylbenzene	ND	100	ug/kg	
87-68-3	Hexachlorobutadiene	ND	250	ug/kg	
591-78-6	2-Hexanone	ND	250	ug/kg	
98-82-8	Isopropylbenzene	ND	250	ug/kg	
99-87-6	p-Isopropyltoluene	ND	250	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	100	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	250	ug/kg	
74-95-3	Methylene bromide	ND	250	ug/kg	
75-09-2	Methylene chloride	ND	100	ug/kg	
91-20-3	Naphthalene	ND	250	ug/kg	
103-65-1	n-Propylbenzene	ND	250	ug/kg	
100-42-5	Styrene	ND	250	ug/kg	
994-05-8	tert-Amyl Methyl Ether	ND	250	ug/kg	
637-92-3	tert-Butyl Ethyl Ether	ND	100	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	250	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	100	ug/kg	
127-18-4	Tetrachloroethene	ND	100	ug/kg	
109-99-9	Tetrahydrofuran	ND	500	ug/kg	
108-88-3	Toluene	ND	250	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	250	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	250	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	100	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	100	ug/kg	
79-01-6	Trichloroethene	ND	100	ug/kg	
75-69-4	Trichlorofluoromethane	ND	100	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	250	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	250	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	250	ug/kg	
75-01-4	Vinyl chloride	ND	100	ug/kg	
	m,p-Xylene	ND	100	ug/kg	
95-47-6	o-Xylene	ND	100	ug/kg	
1330-20-7	Xylene (total)	ND	100	ug/kg	

Method Blank Summary

Job Number: M96225
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSR663-MB	R18611A.D	1	12/07/10	GK	n/a	n/a	MSR663

The QC reported here applies to the following samples: Method: SW846 8260B

M96225-1, M96225-2, M96225-3, M96225-4, M96225-5, M96225-6, M96225-7, M96225-8

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	114% 70-130%
2037-26-5	Toluene-D8	114% 70-130%
460-00-4	4-Bromofluorobenzene	111% 70-130%

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 3

Job Number: M96225

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSR663-BS	R18608A.D	1	12/07/10	GK	n/a	n/a	MSR663
MSR663-BSD	R18609A.D	1	12/07/10	GK	n/a	n/a	MSR663

The QC reported here applies to the following samples:

Method: SW846 8260B

M96225-1, M96225-2, M96225-3, M96225-4, M96225-5, M96225-6, M96225-7, M96225-8

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	2500	2410	96	2160	86	11	70-130/25
71-43-2	Benzene	2500	2740	110	2850	114	4	70-130/25
108-86-1	Bromobenzene	2500	2910	116	2980	119	2	70-130/25
74-97-5	Bromochloromethane	2500	2840	114	2870	115	1	70-130/25
75-27-4	Bromodichloromethane	2500	2950	118	3040	122	3	70-130/25
75-25-2	Bromoform	2500	2900	116	2880	115	1	70-130/25
74-83-9	Bromomethane	2500	2500	100	2590	104	4	70-130/25
78-93-3	2-Butanone (MEK)	2500	2550	102	2490	100	2	70-130/25
104-51-8	n-Butylbenzene	2500	2810	112	2890	116	3	70-130/25
135-98-8	sec-Butylbenzene	2500	2850	114	2950	118	3	70-130/25
98-06-6	tert-Butylbenzene	2500	2920	117	3020	121	3	70-130/25
75-15-0	Carbon disulfide	2500	2770	111	2840	114	2	70-130/25
56-23-5	Carbon tetrachloride	2500	3190	128	3280	131* a	3	70-130/25
108-90-7	Chlorobenzene	2500	3020	121	3080	123	2	70-130/25
75-00-3	Chloroethane	2500	2430	97	2560	102	5	70-130/25
67-66-3	Chloroform	2500	2770	111	2820	113	2	70-130/25
74-87-3	Chloromethane	2500	2150	86	2180	87	1	70-130/25
95-49-8	o-Chlorotoluene	2500	2760	110	2880	115	4	70-130/25
106-43-4	p-Chlorotoluene	2500	2840	114	2930	117	3	70-130/25
108-20-3	Di-Isopropyl ether	2500	2400	96	2430	97	1	70-130/25
96-12-8	1,2-Dibromo-3-chloropropane	2500	2560	102	2590	104	1	70-130/25
124-48-1	Dibromochloromethane	2500	3250	130	3290	132* a	1	70-130/25
106-93-4	1,2-Dibromoethane	2500	2950	118	2960	118	0	70-130/25
95-50-1	1,2-Dichlorobenzene	2500	2920	117	2960	118	1	70-130/25
541-73-1	1,3-Dichlorobenzene	2500	2910	116	2970	119	2	70-130/25
106-46-7	1,4-Dichlorobenzene	2500	2900	116	2960	118	2	70-130/25
75-71-8	Dichlorodifluoromethane	2500	2700	108	2730	109	1	70-130/25
75-34-3	1,1-Dichloroethane	2500	2620	105	2670	107	2	70-130/25
107-06-2	1,2-Dichloroethane	2500	2860	114	2900	116	1	70-130/25
75-35-4	1,1-Dichloroethene	2500	2790	112	2860	114	2	70-130/25
156-59-2	cis-1,2-Dichloroethene	2500	2630	105	2690	108	2	70-130/25
156-60-5	trans-1,2-Dichloroethene	2500	2700	108	2800	112	4	70-130/25
78-87-5	1,2-Dichloropropane	2500	2600	104	2660	106	2	70-130/25
142-28-9	1,3-Dichloropropane	2500	2840	114	2840	114	0	70-130/25
594-20-7	2,2-Dichloropropane	2500	2950	118	3030	121	3	70-130/25
563-58-6	1,1-Dichloropropene	2500	2850	114	2960	118	4	70-130/25

Blank Spike/Blank Spike Duplicate Summary

Page 2 of 3

Job Number: M96225

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSR663-BS	R18608A.D	1	12/07/10	GK	n/a	n/a	MSR663
MSR663-BSD	R18609A.D	1	12/07/10	GK	n/a	n/a	MSR663

The QC reported here applies to the following samples:

Method: SW846 8260B

M96225-1, M96225-2, M96225-3, M96225-4, M96225-5, M96225-6, M96225-7, M96225-8

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
10061-01-5	cis-1,3-Dichloropropene	2500	2910	116	3010	120	3	70-130/25
10061-02-6	trans-1,3-Dichloropropene	2500	3200	128	3250	130	2	70-130/25
123-91-1	1,4-Dioxane	12500	11600	93	12700	102	9	70-130/25
60-29-7	Ethyl Ether	2500	2530	101	2570	103	2	70-130/25
100-41-4	Ethylbenzene	2500	2930	117	2990	120	2	70-130/25
87-68-3	Hexachlorobutadiene	2500	3290	132* a	3390	136* a	3	70-130/25
591-78-6	2-Hexanone	2500	2190	88	2070	83	6	70-130/25
98-82-8	Isopropylbenzene	2500	3290	132* a	3430	137* a	4	70-130/25
99-87-6	p-Isopropyltoluene	2500	2930	117	3010	120	3	70-130/25
1634-04-4	Methyl Tert Butyl Ether	2500	2550	102	2540	102	0	70-130/25
108-10-1	4-Methyl-2-pentanone (MIBK)	2500	2140	86	2170	87	1	70-130/25
74-95-3	Methylene bromide	2500	2900	116	2950	118	2	70-130/25
75-09-2	Methylene chloride	2500	2660	106	2760	110	4	70-130/25
91-20-3	Naphthalene	2500	2670	107	2740	110	3	70-130/25
103-65-1	n-Propylbenzene	2500	2790	112	2910	116	4	70-130/25
100-42-5	Styrene	2500	3080	123	3180	127	3	70-130/25
994-05-8	tert-Amyl Methyl Ether	2500	2640	106	2690	108	2	70-130/25
637-92-3	tert-Butyl Ethyl Ether	2500	2580	103	2590	104	0	70-130/25
630-20-6	1,1,1,2-Tetrachloroethane	2500	3190	128	3240	130	2	70-130/25
79-34-5	1,1,2,2-Tetrachloroethane	2500	2660	106	2690	108	1	70-130/25
127-18-4	Tetrachloroethene	2500	3210	128	3290	132* a	2	70-130/25
109-99-9	Tetrahydrofuran	2500	2080	83	2060	82	1	70-130/25
108-88-3	Toluene	2500	2800	112	2930	117	5	70-130/25
87-61-6	1,2,3-Trichlorobenzene	2500	2870	115	2930	117	2	70-130/25
120-82-1	1,2,4-Trichlorobenzene	2500	3000	120	3060	122	2	70-130/25
71-55-6	1,1,1-Trichloroethane	2500	3040	122	3100	124	2	70-130/25
79-00-5	1,1,2-Trichloroethane	2500	2690	108	2710	108	1	70-130/25
79-01-6	Trichloroethene	2500	2800	112	2910	116	4	70-130/25
75-69-4	Trichlorofluoromethane	2500	2980	119	3030	121	2	70-130/25
96-18-4	1,2,3-Trichloropropane	2500	2610	104	2690	108	3	70-130/25
95-63-6	1,2,4-Trimethylbenzene	2500	2890	116	2980	119	3	70-130/25
108-67-8	1,3,5-Trimethylbenzene	2500	2910	116	2980	119	2	70-130/25
75-01-4	Vinyl chloride	2500	2990	120	2920	117	2	70-130/25
	m,p-Xylene	5000	5920	118	6100	122	3	70-130/25
95-47-6	o-Xylene	2500	2960	118	3050	122	3	70-130/25
1330-20-7	Xylene (total)	7500	8880	118	9160	122	3	70-130/25

Blank Spike/Blank Spike Duplicate Summary

Page 3 of 3

Job Number: M96225

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSR663-BS	R18608A.D	1	12/07/10	GK	n/a	n/a	MSR663
MSR663-BSD	R18609A.D	1	12/07/10	GK	n/a	n/a	MSR663

The QC reported here applies to the following samples:

Method: SW846 8260B

M96225-1, M96225-2, M96225-3, M96225-4, M96225-5, M96225-6, M96225-7, M96225-8

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	114%	117%	70-130%
2037-26-5	Toluene-D8	113%	117%	70-130%
460-00-4	4-Bromofluorobenzene	111%	115%	70-130%

(a) Outside control limits. Blank Spike meets program technical requirements.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: M96225
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M96199-5MS	R18621.D	1	12/07/10	GK	n/a	n/a	MSR663
M96199-5MSD	R18622.D	1	12/07/10	GK	n/a	n/a	MSR663
M96199-5	R18620.D	1	12/07/10	GK	n/a	n/a	MSR663

The QC reported here applies to the following samples:

Method: SW846 8260B

M96225-1, M96225-2, M96225-3, M96225-4, M96225-5, M96225-6, M96225-7, M96225-8

CAS No.	Compound	M96199-5 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND	2760	2090	76	1650	60* a	24	70-130/30
71-43-2	Benzene	20.4	2760	3010	108	3150	114	5	70-130/30
108-86-1	Bromobenzene	ND	2760	3100	112	3220	117	4	70-130/30
74-97-5	Bromochloromethane	ND	2760	2990	108	3140	114	5	70-130/30
75-27-4	Bromodichloromethane	ND	2760	3180	115	3250	118	2	70-130/30
75-25-2	Bromoform	ND	2760	3080	112	3130	114	2	70-130/30
74-83-9	Bromomethane	ND	2760	2820	102	2960	107	5	70-130/30
78-93-3	2-Butanone (MEK)	ND	2760	2390	87	2020	73	17	70-130/30
104-51-8	n-Butylbenzene	ND	2760	3030	110	3170	115	5	70-130/30
135-98-8	sec-Butylbenzene	ND	2760	3080	112	3250	118	5	70-130/30
98-06-6	tert-Butylbenzene	ND	2760	3130	114	3290	119	5	70-130/30
75-15-0	Carbon disulfide	ND	2760	2980	108	3210	116	7	70-130/30
56-23-5	Carbon tetrachloride	ND	2760	3510	127	3610	131* a	3	70-130/30
108-90-7	Chlorobenzene	ND	2760	3270	119	3380	123	3	70-130/30
75-00-3	Chloroethane	ND	2760	2730	99	2930	106	7	70-130/30
67-66-3	Chloroform	ND	2760	2990	108	3100	112	4	70-130/30
74-87-3	Chloromethane	ND	2760	2310	84	2560	93	10	70-130/30
95-49-8	o-Chlorotoluene	ND	2760	2980	108	3110	113	4	70-130/30
106-43-4	p-Chlorotoluene	ND	2760	3050	111	3180	115	4	70-130/30
108-20-3	Di-Isopropyl ether	ND	2760	2580	94	2690	98	4	70-130/30
96-12-8	1,2-Dibromo-3-chloropropane	ND	2760	2780	101	2840	103	2	70-130/30
124-48-1	Dibromochloromethane	ND	2760	3480	126	3530	128	1	70-130/30
106-93-4	1,2-Dibromoethane	ND	2760	3160	115	3240	118	3	70-130/30
95-50-1	1,2-Dichlorobenzene	ND	2760	3130	114	3230	117	3	70-130/30
541-73-1	1,3-Dichlorobenzene	ND	2760	3130	114	3240	118	3	70-130/30
106-46-7	1,4-Dichlorobenzene	ND	2760	3080	112	3230	117	5	70-130/30
75-71-8	Dichlorodifluoromethane	ND	2760	2900	105	3080	112	6	70-130/30
75-34-3	1,1-Dichloroethane	ND	2760	2840	103	2990	108	5	70-130/30
107-06-2	1,2-Dichloroethane	ND	2760	3100	112	3170	115	2	70-130/30
75-35-4	1,1-Dichloroethene	ND	2760	3010	109	3190	116	6	70-130/30
156-59-2	cis-1,2-Dichloroethene	ND	2760	2850	103	2980	108	4	70-130/30
156-60-5	trans-1,2-Dichloroethene	ND	2760	2930	106	3130	114	7	70-130/30
78-87-5	1,2-Dichloropropane	ND	2760	2820	102	2950	107	5	70-130/30
142-28-9	1,3-Dichloropropane	ND	2760	3040	110	3060	111	1	70-130/30
594-20-7	2,2-Dichloropropane	ND	2760	3140	114	3290	119	5	70-130/30
563-58-6	1,1-Dichloropropene	ND	2760	3110	113	3300	120	6	70-130/30

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 3

Job Number: M96225
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M96199-5MS	R18621.D	1	12/07/10	GK	n/a	n/a	MSR663
M96199-5MSD	R18622.D	1	12/07/10	GK	n/a	n/a	MSR663
M96199-5	R18620.D	1	12/07/10	GK	n/a	n/a	MSR663

The QC reported here applies to the following samples:

Method: SW846 8260B

M96225-1, M96225-2, M96225-3, M96225-4, M96225-5, M96225-6, M96225-7, M96225-8

CAS No.	Compound	M96199-5 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
10061-01-5	cis-1,3-Dichloropropene	ND	2760	3160	115	3250	118	3	70-130/30
10061-02-6	trans-1,3-Dichloropropene	ND	2760	3430	124	3520	128	3	70-130/30
123-91-1	1,4-Dioxane	ND	13800	12800	93	13400	97	5	70-130/30
60-29-7	Ethyl Ether	ND	2760	2700	98	2810	102	4	70-130/30
100-41-4	Ethylbenzene	ND	2760	3190	116	3290	119	3	70-130/30
87-68-3	Hexachlorobutadiene	ND	2760	3440	125	3650	132* a	6	70-130/30
591-78-6	2-Hexanone	ND	2760	2050	74	1790	65* a	14	70-130/30
98-82-8	Isopropylbenzene	ND	2760	3590	130	3780	137* a	5	70-130/30
99-87-6	p-Isopropyltoluene	ND	2760	3160	115	3310	120	5	70-130/30
1634-04-4	Methyl Tert Butyl Ether	ND	2760	2740	99	2840	103	4	70-130/30
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	2760	2300	83	2290	83	0	70-130/30
74-95-3	Methylene bromide	ND	2760	3100	112	3160	115	2	70-130/30
75-09-2	Methylene chloride	ND	2760	2910	106	3060	111	5	70-130/30
91-20-3	Naphthalene	136	2760	2820	97	3040	105	8	70-130/30
103-65-1	n-Propylbenzene	ND	2760	3020	110	3170	115	5	70-130/30
100-42-5	Styrene	ND	2760	3350	122	3450	125	3	70-130/30
994-05-8	tert-Amyl Methyl Ether	ND	2760	2850	103	2950	107	3	70-130/30
637-92-3	tert-Butyl Ethyl Ether	ND	2760	2790	101	2880	104	3	70-130/30
630-20-6	1,1,1,2-Tetrachloroethane	ND	2760	3460	126	3550	129	3	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	ND	2760	2830	103	2880	104	2	70-130/30
127-18-4	Tetrachloroethene	ND	2760	3470	126	3590	130	3	70-130/30
109-99-9	Tetrahydrofuran	ND	2760	2290	83	2270	82	1	70-130/30
108-88-3	Toluene	38.8	2760	3100	111	3230	116	4	70-130/30
87-61-6	1,2,3-Trichlorobenzene	ND	2760	2900	105	3130	114	8	70-130/30
120-82-1	1,2,4-Trichlorobenzene	ND	2760	3160	115	3320	120	5	70-130/30
71-55-6	1,1,1-Trichloroethane	ND	2760	3310	120	3440	125	4	70-130/30
79-00-5	1,1,2-Trichloroethane	ND	2760	2970	108	3000	109	1	70-130/30
79-01-6	Trichloroethene	ND	2760	3070	111	3260	118	6	70-130/30
75-69-4	Trichlorofluoromethane	ND	2760	3280	119	3390	123	3	70-130/30
96-18-4	1,2,3-Trichloropropane	ND	2760	2830	103	2860	104	1	70-130/30
95-63-6	1,2,4-Trimethylbenzene	ND	2760	3110	113	3240	118	4	70-130/30
108-67-8	1,3,5-Trimethylbenzene	ND	2760	3130	114	3270	119	4	70-130/30
75-01-4	Vinyl chloride	ND	2760	3610	131* a	3560	129	1	70-130/30
	m,p-Xylene	26.2	5510	6500	117	6730	122	3	70-130/30
95-47-6	o-Xylene	ND	2760	3270	119	3380	123	3	70-130/30
1330-20-7	Xylene (total)	26.2	8270	9760	118	10100	122	3	70-130/30

Matrix Spike/Matrix Spike Duplicate Summary

Page 3 of 3

Job Number: M96225

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M96199-5MS	R18621.D	1	12/07/10	GK	n/a	n/a	MSR663
M96199-5MSD	R18622.D	1	12/07/10	GK	n/a	n/a	MSR663
M96199-5	R18620.D	1	12/07/10	GK	n/a	n/a	MSR663

The QC reported here applies to the following samples:

Method: SW846 8260B

M96225-1, M96225-2, M96225-3, M96225-4, M96225-5, M96225-6, M96225-7, M96225-8

CAS No.	Surrogate Recoveries	MS	MSD	M96199-5	Limits
1868-53-7	Dibromofluoromethane	112%	118%	113%	70-130%
2037-26-5	Toluene-D8	112%	117%	111%	70-130%
460-00-4	4-Bromofluorobenzene	110%	113%	111%	70-130%

(a) Outside control limits due to possible matrix interference. Refer to Blank Spike.

Volatile Internal Standard Area Summary

Page 1 of 1

Job Number: M96225
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Check Std: MSR663-CC638
Lab File ID: R18607A.D
Instrument ID: GCMSR
Injection Date: 12/07/10
Injection Time: 11:42
Method: SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	245633	9.11	334396	9.98	163836	13.25	209360	15.81	57565	6.69
Upper Limit ^a	491266	9.61	668792	10.48	327672	13.75	418720	16.31	115130	7.19
Lower Limit ^b	122817	8.61	167198	9.48	81918	12.75	104680	15.31	28783	6.19

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSR663-BS	253675	9.11	349518	9.99	168530	13.25	215284	15.81	59624	6.69
MSR663-BSD	263012	9.11	358034	9.99	173848	13.25	219560	15.81	60013	6.69
MSR663-MB	242830	9.11	323578	9.99	149093	13.25	195619	15.81	57708	6.69
M96225-1	241428	9.11	320487	9.99	149117	13.25	198728	15.81	58413	6.69
M96225-2	242379	9.11	321117	9.99	149308	13.25	199531	15.81	57282	6.69
M96225-4	248034	9.12	327937	9.99	152646	13.25	201398	15.81	60138	6.69
M96225-5	244906	9.11	322125	9.99	152153	13.25	200450	15.81	62710	6.69
M96225-6	255050	9.12	338140	9.99	155352	13.25	204976	15.81	59382	6.69
M96225-7	257923	9.12	341496	9.99	157408	13.25	207045	15.81	58768	6.70
M96225-8	252139	9.11	333503	9.99	156694	13.25	206389	15.81	57477	6.69
ZZZZZZ	255355	9.12	346440	9.99	160157	13.25	211754	15.81	58299	6.69
M96199-5	254353	9.11	343345	9.99	158674	13.25	204410	15.81	59499	6.69
M96199-5MS	256007	9.11	351908	9.99	170707	13.25	220648	15.81	58454	6.69
M96199-5MSD	262654	9.11	361449	9.98	175747	13.25	225201	15.81	61397	6.69
ZZZZZZ	242399	9.11	326304	9.99	157304	13.25	215343	15.81	60801	6.68
ZZZZZZ	248803	9.12	337716	9.99	160511	13.25	219898	15.81	61946	6.68
ZZZZZZ	265404	9.11	356400	9.99	166624	13.25	216708	15.81	66027	6.69
ZZZZZZ	261529	9.11	350386	9.99	161029	13.25	210522	15.81	63374	6.69
ZZZZZZ	254737	9.11	345434	9.99	157067	13.25	207079	15.81	62685	6.69
ZZZZZZ	252366	9.11	339362	9.99	158197	13.25	208732	15.81	64542	6.69
ZZZZZZ	254895	9.11	344973	9.99	161294	13.25	210656	15.81	64093	6.69
ZZZZZZ	257016	9.11	340928	9.99	159441	13.25	208644	15.81	64093	6.69
M96225-3	259611	9.11	349349	9.99	161216	13.25	214770	15.81	64838	6.69
ZZZZZZ	46991 ^c	9.12	44006 ^c	10.00	25167 ^c	13.26	20151 ^c	15.82	1387 ^c	6.67

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.

(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

(c) Outside control limits due to possible matrix interference. Confirmed by reanalysis.

Volatile Surrogate Recovery Summary

Page 1 of 1

Job Number: M96225

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Method: SW846 8260B

Matrix: SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
M96225-1	R18612.D	108.0	108.0	105.0
M96225-2	R18613.D	110.0	108.0	104.0
M96225-3	R18632.D	99.0	114.0	111.0
M96225-4	R18614.D	112.0	111.0	109.0
M96225-5	R18615.D	111.0	113.0	108.0
M96225-6	R18616.D	109.0	111.0	108.0
M96225-7	R18617.D	108.0	108.0	107.0
M96225-8	R18618.D	109.0	110.0	108.0
M96199-5MS	R18621.D	112.0	112.0	110.0
M96199-5MSD	R18622.D	118.0	117.0	113.0
MSR663-BS	R18608A.D	114.0	113.0	111.0
MSR663-BSD	R18609A.D	117.0	117.0	115.0
MSR663-MB	R18611A.D	114.0	114.0	111.0

Surrogate Compounds

Recovery Limits

S1 = Dibromofluoromethane

70-130%

S2 = Toluene-D8

70-130%

S3 = 4-Bromofluorobenzene

70-130%

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Page 1 of 2

Job Number: M96225
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23515-MB	S19763.D	1	12/06/10	PR	12/03/10	OP23515	MSS816

The QC reported here applies to the following samples:

Method: SW846 8270C

M96225-1, M96225-2, M96225-3, M96225-4, M96225-5, M96225-6, M96225-7, M96225-8

CAS No.	Compound	Result	RL	Units	Q
65-85-0	Benzoic acid	ND	500	ug/kg	
95-57-8	2-Chlorophenol	ND	250	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	500	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	500	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	500	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	990	ug/kg	
95-48-7	2-Methylphenol	ND	500	ug/kg	
	3&4-Methylphenol	ND	500	ug/kg	
88-75-5	2-Nitrophenol	ND	500	ug/kg	
100-02-7	4-Nitrophenol	ND	990	ug/kg	
87-86-5	Pentachlorophenol	ND	500	ug/kg	
108-95-2	Phenol	ND	250	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	500	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	500	ug/kg	
83-32-9	Acenaphthene	ND	250	ug/kg	
208-96-8	Acenaphthylene	ND	250	ug/kg	
98-86-2	Acetophenone	ND	500	ug/kg	
62-53-3	Aniline	ND	500	ug/kg	
120-12-7	Anthracene	ND	250	ug/kg	
56-55-3	Benzo(a)anthracene	ND	250	ug/kg	
50-32-8	Benzo(a)pyrene	ND	250	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	250	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	250	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	250	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	250	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	250	ug/kg	
91-58-7	2-Chloronaphthalene	ND	250	ug/kg	
106-47-8	4-Chloroaniline	ND	500	ug/kg	
218-01-9	Chrysene	ND	250	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	250	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	250	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	250	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	250	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	250	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	250	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	250	ug/kg	

Method Blank Summary

Page 2 of 2

Job Number: M96225
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23515-MB	S19763.D	1	12/06/10	PR	12/03/10	OP23515	MSS816

The QC reported here applies to the following samples:

Method: SW846 8270C

M96225-1, M96225-2, M96225-3, M96225-4, M96225-5, M96225-6, M96225-7, M96225-8

CAS No.	Compound	Result	RL	Units	Q
121-14-2	2,4-Dinitrotoluene	ND	500	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	500	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	250	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	250	ug/kg	
132-64-9	Dibenzofuran	ND	250	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	250	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	250	ug/kg	
84-66-2	Diethyl phthalate	ND	250	ug/kg	
131-11-3	Dimethyl phthalate	ND	250	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	250	ug/kg	
206-44-0	Fluoranthene	ND	250	ug/kg	
86-73-7	Fluorene	ND	250	ug/kg	
118-74-1	Hexachlorobenzene	ND	250	ug/kg	
87-68-3	Hexachlorobutadiene	ND	250	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	500	ug/kg	
67-72-1	Hexachloroethane	ND	250	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	250	ug/kg	
78-59-1	Isophorone	ND	250	ug/kg	
91-57-6	2-Methylnaphthalene	ND	250	ug/kg	
91-20-3	Naphthalene	ND	250	ug/kg	
98-95-3	Nitrobenzene	ND	250	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	250	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	250	ug/kg	
85-01-8	Phenanthrene	ND	250	ug/kg	
129-00-0	Pyrene	ND	250	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	250	ug/kg	

CAS No.	Surrogate Recoveries	Limits
367-12-4	2-Fluorophenol	60% 30-130%
4165-62-2	Phenol-d5	63% 30-130%
118-79-6	2,4,6-Tribromophenol	64% 30-130%
4165-60-0	Nitrobenzene-d5	62% 30-130%
321-60-8	2-Fluorobiphenyl	67% 30-130%
1718-51-0	Terphenyl-d14	86% 30-130%

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 3

Job Number: M96225

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23515-BS	S19764.D	1	12/06/10	PR	12/03/10	OP23515	MSS816
OP23515-BSD	S19765.D	1	12/06/10	PR	12/03/10	OP23515	MSS816

The QC reported here applies to the following samples:

Method: SW846 8270C

M96225-1, M96225-2, M96225-3, M96225-4, M96225-5, M96225-6, M96225-7, M96225-8

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic acid	4970	653	13* a	596	12* a	9	30-130/30
95-57-8	2-Chlorophenol	4970	3480	70	3150	63	10	30-130/30
59-50-7	4-Chloro-3-methyl phenol	4970	4090	82	3710	75	10	30-130/30
120-83-2	2,4-Dichlorophenol	4970	3870	78	3490	70	10	30-130/30
105-67-9	2,4-Dimethylphenol	4970	3430	69	3180	64	8	30-130/30
51-28-5	2,4-Dinitrophenol	4970	1520	31	1290	26* a	16	30-130/30
95-48-7	2-Methylphenol	4970	3560	72	3280	66	8	30-130/30
	3&4-Methylphenol	9940	7370	74	6790	68	8	30-130/30
88-75-5	2-Nitrophenol	4970	3690	74	3350	67	10	30-130/30
100-02-7	4-Nitrophenol	4970	3710	75	3360	68	10	30-130/30
87-86-5	Pentachlorophenol	4970	3210	65	2890	58	10	30-130/30
108-95-2	Phenol	4970	3350	67	3070	62	9	30-130/30
95-95-4	2,4,5-Trichlorophenol	4970	3950	79	3570	72	10	30-130/30
88-06-2	2,4,6-Trichlorophenol	4970	3900	78	3580	72	9	30-130/30
83-32-9	Acenaphthene	2490	1960	79	1790	72	9	40-140/30
208-96-8	Acenaphthylene	2490	1450	58	1340	54	8	40-140/30
98-86-2	Acetophenone	2490	1710	69	1560	63	9	40-140/30
62-53-3	Aniline	2490	1450	58	1320	53	9	40-140/30
120-12-7	Anthracene	2490	2060	83	1900	76	8	40-140/30
56-55-3	Benzo(a)anthracene	2490	2430	98	2250	91	8	40-140/30
50-32-8	Benzo(a)pyrene	2490	2240	90	2010	81	11	40-140/30
205-99-2	Benzo(b)fluoranthene	2490	2360	95	2170	87	8	40-140/30
191-24-2	Benzo(g,h,i)perylene	2490	2210	89	2060	83	7	40-140/30
207-08-9	Benzo(k)fluoranthene	2490	2290	92	2090	84	9	40-140/30
101-55-3	4-Bromophenyl phenyl ether	2490	2070	83	1900	76	9	40-140/30
85-68-7	Butyl benzyl phthalate	2490	2550	103	2310	93	10	40-140/30
91-58-7	2-Chloronaphthalene	2490	1890	76	1750	70	8	40-140/30
106-47-8	4-Chloroaniline	2490	1610	65	1470	59	9	40-140/30
218-01-9	Chrysene	2490	2520	101	2320	93	8	40-140/30
111-91-1	bis(2-Chloroethoxy)methane	2490	1780	72	1610	65	10	40-140/30
111-44-4	bis(2-Chloroethyl)ether	2490	1680	68	1510	61	11	40-140/30
108-60-1	bis(2-Chloroisopropyl)ether	2490	1600	64	1450	58	10	40-140/30
95-50-1	1,2-Dichlorobenzene	2490	1660	67	1490	60	11	40-140/30
122-66-7	1,2-Diphenylhydrazine	2490	1860	75	1690	68	10	40-140/30
541-73-1	1,3-Dichlorobenzene	2490	1600	64	1440	58	11	40-140/30
106-46-7	1,4-Dichlorobenzene	2490	1620	65	1460	59	10	40-140/30

Blank Spike/Blank Spike Duplicate Summary

Page 2 of 3

Job Number: M96225
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23515-BS	S19764.D	1	12/06/10	PR	12/03/10	OP23515	MSS816
OP23515-BSD	S19765.D	1	12/06/10	PR	12/03/10	OP23515	MSS816

The QC reported here applies to the following samples:

Method: SW846 8270C

M96225-1, M96225-2, M96225-3, M96225-4, M96225-5, M96225-6, M96225-7, M96225-8

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
121-14-2	2,4-Dinitrotoluene	2490	2170	87	1960	79	10	40-140/30
606-20-2	2,6-Dinitrotoluene	2490	2090	84	1900	76	10	40-140/30
91-94-1	3,3'-Dichlorobenzidine	2490	2040	82	1890	76	8	40-140/30
53-70-3	Dibenzo(a,h)anthracene	2490	2440	98	2310	93	5	40-140/30
132-64-9	Dibenzofuran	2490	1950	78	1780	72	9	40-140/30
84-74-2	Di-n-butyl phthalate	2490	2380	96	2180	88	9	40-140/30
117-84-0	Di-n-octyl phthalate	2490	3170	128	2760	111	14	40-140/30
84-66-2	Diethyl phthalate	2490	2190	88	1990	80	10	40-140/30
131-11-3	Dimethyl phthalate	2490	2100	85	1900	76	10	40-140/30
117-81-7	bis(2-Ethylhexyl)phthalate	2490	2660	107	2430	98	9	40-140/30
206-44-0	Fluoranthene	2490	2230	90	2080	84	7	40-140/30
86-73-7	Fluorene	2490	2050	82	1890	76	8	40-140/30
118-74-1	Hexachlorobenzene	2490	2070	83	1890	76	9	40-140/30
87-68-3	Hexachlorobutadiene	2490	1720	69	1540	62	11	40-140/30
77-47-4	Hexachlorocyclopentadiene	2490	902	36* a	788	32* a	13	40-140/30
67-72-1	Hexachloroethane	2490	1570	63	1410	57	11	40-140/30
193-39-5	Indeno(1,2,3-cd)pyrene	2490	2410	97	2250	91	7	40-140/30
78-59-1	Isophorone	2490	1780	72	1630	66	9	40-140/30
91-57-6	2-Methylnaphthalene	2490	1820	73	1670	67	9	40-140/30
91-20-3	Naphthalene	2490	1780	72	1620	65	9	40-140/30
98-95-3	Nitrobenzene	2490	1640	66	1470	59	11	40-140/30
621-64-7	N-Nitroso-di-n-propylamine	2490	1860	75	1690	68	10	40-140/30
86-30-6	N-Nitrosodiphenylamine	2490	2110	85	1940	78	8	40-140/30
85-01-8	Phenanthrene	2490	1970	79	1800	72	9	40-140/30
129-00-0	Pyrene	2490	2300	93	2060	83	11	40-140/30
120-82-1	1,2,4-Trichlorobenzene	2490	1720	69	1560	63	10	40-140/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	69%	62%	30-130%
4165-62-2	Phenol-d5	72%	66%	30-130%
118-79-6	2,4,6-Tribromophenol	84%	77%	30-130%
4165-60-0	Nitrobenzene-d5	70%	63%	30-130%
321-60-8	2-Fluorobiphenyl	76%	70%	30-130%
1718-51-0	Terphenyl-d14	96%	86%	30-130%

Blank Spike/Blank Spike Duplicate Summary

Page 3 of 3

Job Number: M96225

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23515-BS	S19764.D	1	12/06/10	PR	12/03/10	OP23515	MSS816
OP23515-BSD	S19765.D	1	12/06/10	PR	12/03/10	OP23515	MSS816

The QC reported here applies to the following samples:

Method: SW846 8270C

M96225-1, M96225-2, M96225-3, M96225-4, M96225-5, M96225-6, M96225-7, M96225-8

(a) Outside control limits. Blank Spike meets program technical requirements.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: M96225
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23515-MS	S19766.D	1	12/06/10	PR	12/03/10	OP23515	MSS816
OP23515-MSD	S19767.D	1	12/06/10	PR	12/03/10	OP23515	MSS816
M96225-8	S19781.D	1	12/07/10	PR	12/03/10	OP23515	MSS816

The QC reported here applies to the following samples:

Method: SW846 8270C

M96225-1, M96225-2, M96225-3, M96225-4, M96225-5, M96225-6, M96225-7, M96225-8

CAS No.	Compound	M96225-8 ug/kg	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic acid	ND	6610	2310	35	1850	28* a	22	30-130/30
95-57-8	2-Chlorophenol	ND	6610	4170	63	3700	56	12	30-130/30
59-50-7	4-Chloro-3-methyl phenol	ND	6610	5010	76	4340	66	14	30-130/30
120-83-2	2,4-Dichlorophenol	ND	6610	4720	71	4220	64	11	30-130/30
105-67-9	2,4-Dimethylphenol	167	6610	4500	66	4200	61	7	30-130/30
51-28-5	2,4-Dinitrophenol	ND	6610	1080	16* a	ND	0* a	200* a	30-130/30
95-48-7	2-Methylphenol	98.2	6610	4510	67	4040	60	11	30-130/30
	3&4-Methylphenol	727	13200	9480	66	8920	62	6	30-130/30
88-75-5	2-Nitrophenol	ND	6610	2520	38	2090	32	19	30-130/30
100-02-7	4-Nitrophenol	ND	6610	4530	69	4380	67	3	30-130/30
87-86-5	Pentachlorophenol	ND	6610	5030	76	4200	64	18	30-130/30
108-95-2	Phenol	ND	6610	4160	63	4050	62	3	30-130/30
95-95-4	2,4,5-Trichlorophenol	ND	6610	5160	78	4570	69	12	30-130/30
88-06-2	2,4,6-Trichlorophenol	ND	6610	5010	76	4560	69	9	30-130/30
83-32-9	Acenaphthene	3830	3300	5810	60	10300	197* b	56* c	40-140/30
208-96-8	Acenaphthylene	471	3300	2160	51	5780	161* b	91* c	40-140/30
98-86-2	Acetophenone	ND	3300	2030	61	1810	55	11	40-140/30
62-53-3	Aniline	ND	3300	1460	44	1310	40	11	40-140/30
120-12-7	Anthracene	4020	3300	6290	69	27400	710* b	125* c	40-140/30
56-55-3	Benzo(a)anthracene	5400	3300	7390	60	36200	936* b	132* c	40-140/30
50-32-8	Benzo(a)pyrene	3260	3300	5160	58	20400	521* b	119* c	40-140/30
205-99-2	Benzo(b)fluoranthene	3300	3300	4640	41	25500	675* b	138* c	40-140/30
191-24-2	Benzo(g,h,i)perylene	998	3300	4750	114	8590	231* b	58* c	40-140/30
207-08-9	Benzo(k)fluoranthene	2590	3300	4470	57	6590	122	38* c	40-140/30
101-55-3	4-Bromophenyl phenyl ether	ND	3300	2620	79	2410	73	8	40-140/30
85-68-7	Butyl benzyl phthalate	ND	3300	3140	95	2920	89	7	40-140/30
91-58-7	2-Chloronaphthalene	ND	3300	2260	68	2070	63	9	40-140/30
106-47-8	4-Chloroaniline	ND	3300	1600	48	1650	50	3	40-140/30
218-01-9	Chrysene	5550	3300	7510	59	32400	816* b	125* c	40-140/30
111-91-1	bis(2-Chloroethoxy)methane	ND	3300	2070	63	1830	56	12	40-140/30
111-44-4	bis(2-Chloroethyl)ether	ND	3300	2060	62	1750	53	16	40-140/30
108-60-1	bis(2-Chloroisopropyl)ether	ND	3300	1900	58	1620	49	16	40-140/30
95-50-1	1,2-Dichlorobenzene	ND	3300	1920	58	1660	50	15	40-140/30
122-66-7	1,2-Diphenylhydrazine	ND	3300	2150	65	2680	81	22	40-140/30
541-73-1	1,3-Dichlorobenzene	ND	3300	1860	56	1530	46	19	40-140/30
106-46-7	1,4-Dichlorobenzene	ND	3300	1880	57	1600	49	16	40-140/30

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 3

Job Number: M96225
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23515-MS	S19766.D	1	12/06/10	PR	12/03/10	OP23515	MSS816
OP23515-MSD	S19767.D	1	12/06/10	PR	12/03/10	OP23515	MSS816
M96225-8	S19781.D	1	12/07/10	PR	12/03/10	OP23515	MSS816

The QC reported here applies to the following samples:

Method: SW846 8270C

M96225-1, M96225-2, M96225-3, M96225-4, M96225-5, M96225-6, M96225-7, M96225-8

CAS No.	Compound	M96225-8 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
121-14-2	2,4-Dinitrotoluene	ND		3300	1770	54	1680	51	5	40-140/30
606-20-2	2,6-Dinitrotoluene	ND		3300	1890	57	1640	50	14	40-140/30
91-94-1	3,3'-Dichlorobenzidine	ND		3300	ND	0* b	1270	39* b	200* c	40-140/30
53-70-3	Dibenzo(a,h)anthracene	542		3300	3700	96	6190	172* b	50* c	40-140/30
132-64-9	Dibenzofuran	2010		3300	4200	66	9510	228* b	77* c	40-140/30
84-74-2	Di-n-butyl phthalate	ND		3300	2830	86	2720	83	4	40-140/30
117-84-0	Di-n-octyl phthalate	ND		3300	2990	91	2270	69	27	40-140/30
84-66-2	Diethyl phthalate	ND		3300	2680	81	2380	72	12	40-140/30
131-11-3	Dimethyl phthalate	ND		3300	2490	75	2240	68	11	40-140/30
117-81-7	bis(2-Ethylhexyl)phthalate	ND		3300	3300	100	2390	73	32* c	40-140/30
206-44-0	Fluoranthene	10500		3300	10900	12* d	52900	1288* d	132* d	40-140/30
86-73-7	Fluorene	3610		3300	6000	72	17200	413* b	97* c	40-140/30
118-74-1	Hexachlorobenzene	ND		3300	2490	75	2300	70	8	40-140/30
87-68-3	Hexachlorobutadiene	ND		3300	2010	61	1750	53	14	40-140/30
77-47-4	Hexachlorocyclopentadiene	ND		3300	ND	0* a	ND	0* a	nc	40-140/30
67-72-1	Hexachloroethane	ND		3300	527	16* b	392	12* b	29	40-140/30
193-39-5	Indeno(1,2,3-cd)pyrene	1150		3300	4570	104	9400	251* b	69* c	40-140/30
78-59-1	Isophorone	ND		3300	2110	64	1910	58	10	40-140/30
91-57-6	2-Methylnaphthalene	2010		3300	3920	58	6700	143* b	52* c	40-140/30
91-20-3	Naphthalene	5360		3300	6450	33* b	6900	47	7	40-140/30
98-95-3	Nitrobenzene	ND		3300	1740	53	1530	46	13	40-140/30
621-64-7	N-Nitroso-di-n-propylamine	ND		3300	2140	65	1920	58	11	40-140/30
86-30-6	N-Nitrosodiphenylamine	ND		3300	2910	88	4180	127	36* c	40-140/30
85-01-8	Phenanthrene	12700		3300	14900	67	60500	1453* d	121* c	40-140/30
129-00-0	Pyrene	7840		3300	11700	117	45300	1138* d	118* c	40-140/30
120-82-1	1,2,4-Trichlorobenzene	ND		3300	2040	62	1800	55	13	40-140/30

CAS No.	Surrogate Recoveries	MS	MSD	M96225-8	Limits
367-12-4	2-Fluorophenol	62%	55%	61%	30-130%
4165-62-2	Phenol-d5	64%	56%	62%	30-130%
118-79-6	2,4,6-Tribromophenol	82%	77%	77%	30-130%
4165-60-0	Nitrobenzene-d5	56%	51%	56%	30-130%
321-60-8	2-Fluorobiphenyl	68%	63%	70%	30-130%
1718-51-0	Terphenyl-d14	84%	75%	61%	30-130%

Matrix Spike/Matrix Spike Duplicate Summary

Page 3 of 3

Job Number: M96225

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23515-MS	S19766.D	1	12/06/10	PR	12/03/10	OP23515	MSS816
OP23515-MSD	S19767.D	1	12/06/10	PR	12/03/10	OP23515	MSS816
M96225-8	S19781.D	1	12/07/10	PR	12/03/10	OP23515	MSS816

The QC reported here applies to the following samples:

Method: SW846 8270C

M96225-1, M96225-2, M96225-3, M96225-4, M96225-5, M96225-6, M96225-7, M96225-8

- (a) Outside control limits. Blank Spike meets program technical requirements.
- (b) Outside control limits due to possible matrix interference. Refer to Blank Spike.
- (c) High RPD due to possible matrix interference and/or sample non-homogeneity.
- (d) Outside control limits due to high level in sample relative to spike amount.

Semivolatile Internal Standard Area Summary

Page 1 of 1

Job Number: M96225
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Check Std: MSS816-CC805	Injection Date: 12/06/10
Lab File ID: S19759.D	Injection Time: 18:39
Instrument ID: GCMSS	Method: SW846 8270C

	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Check Std	322489	6.08	1256165	7.45	646294	9.69	1060346	11.91	987196	16.28	919151	18.52
Upper Limit ^a	644978	6.58	2512330	7.95	1292588	10.19	2120692	12.41	1974392	16.78	1838302	19.02
Lower Limit ^b	161245	5.58	628083	6.95	323147	9.19	530173	11.41	493598	15.78	459576	18.02

Lab Sample ID	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
ZZZZZZ	340673	6.08	1364807	7.45	675111	9.69	1087964	11.90	1014064	16.27	923460	18.52
OP23509-LB	379914	6.08	1585362	7.45	790025	9.69	1239902	11.90	1132605	16.27	1017663	18.52
ZZZZZZ	292899	6.08	1235436	7.45	620799	9.69	975647	11.90	825876	16.27	703727	18.52
OP23515-MB	398327	6.08	1689629	7.45	857569	9.69	1325625	11.90	1241886	16.27	1005164	18.52
OP23515-BS	402764	6.08	1586588	7.45	805282	9.69	1298048	11.90	1136922	16.27	955170	18.52
OP23515-BSD	390651	6.08	1539718	7.45	778704	9.69	1243198	11.90	1125802	16.27	983844	18.52
OP23515-MS	428153	6.08	1699122	7.45	837421	9.69	1282463	11.91	985056	16.29	1088928	18.54
OP23515-MSD	377663	6.08	1495614	7.45	717064	9.69	1071504	11.93	1070231	16.36	1502243	18.62
ZZZZZZ	451065	6.08	1875350	7.45	896768	9.69	1290843	11.92	1156321	16.30	1439875	18.56
ZZZZZZ	395834	6.08	1629310	7.45	782701	9.69	1159708	11.91	1189954	16.30	1379257	18.56
ZZZZZZ	411292	6.08	1684834	7.45	786925	9.69	1143251	11.92	1244710	16.31	1293265	18.57
ZZZZZZ	416072	6.08	1724205	7.45	823265	9.69	1195569	11.92	1244021	16.29	1441865	18.54
ZZZZZZ	397842	6.08	1531859	7.45	782504	9.69	1200439	11.91	1234265	16.29	1415889	18.54
ZZZZZZ	453939	6.08	1858791	7.46	840997	9.69	1191468	11.92	942195	16.31	1429479	18.56
M96225-1	326939	6.08	1381301	7.45	685978	9.69	1084523	11.92	1189560	16.32	1278510	18.57
M96225-2	403960	6.08	1654348	7.45	767608	9.69	1125063	11.92	1179223	16.30	1255055	18.56
M96225-3	314863	6.08	1301468	7.45	646407	9.69	1016545	11.91	1052293	16.30	1153066	18.55
M96225-4	426461	6.08	1717899	7.45	792666	9.69	1159318	11.92	1153544	16.30	1246122	18.56
M96225-5	387464	6.08	1562360	7.45	734552	9.69	1094293	11.91	1219035	16.30	1142038	18.55
M96225-6	395148	6.08	1632914	7.45	770297	9.69	1121464	11.92	1247355	16.29	1270905	18.54
M96225-7	448418	6.08	1836022	7.45	861336	9.69	1229516	11.92	1332448	16.30	1294976	18.56
M96225-8	431072	6.08	1748528	7.46	802270	9.69	1143377	11.92	1250760	16.31	1261628	18.56
M95397-50	346797	6.08	1454225	7.45	707354	9.69	1105851	11.91	980884	16.28	881437	18.53

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Page 1 of 1

Job Number: M96225
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Check Std: MSS818-CC805	Injection Date: 12/07/10
Lab File ID: S19786.D	Injection Time: 13:20
Instrument ID: GCMSS	Method: SW846 8270C

	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Check Std	307796	6.07	1219821	7.45	611674	9.68	978838	11.90	943971	16.27	896277	18.52
Upper Limit ^a	615592	6.57	2439642	7.95	1223348	10.18	1957676	12.40	1887942	16.77	1792554	19.02
Lower Limit ^b	153898	5.57	609911	6.95	305837	9.18	489419	11.40	471986	15.77	448139	18.02

Lab Sample ID	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
ZZZZZZ	336899	6.07	1411285	7.44	687713	9.68	1081429	11.90	957059	16.27	913836	18.52
M96225-1	325799	6.07	1382829	7.44	696309	9.68	1105261	11.90	993275	16.27	967970	18.52

IS 1 = 1,4-Dichlorobenzene-d4

IS 2 = Naphthalene-d8

IS 3 = Acenaphthene-D10

IS 4 = Phenanthrene-d10

IS 5 = Chrysene-d12

IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.

(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Surrogate Recovery Summary

Page 1 of 1

Job Number: M96225

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Method: SW846 8270C

Matrix: SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
M96225-1	S19788.D	61.0	70.0	38.0	65.0	77.0	100.0
M96225-1	S19774.D	55.0	63.0	49.0	60.0	70.0	72.0
M96225-2	S19775.D	65.0	66.0	84.0	59.0	75.0	69.0
M96225-3	S19776.D	72.0	70.0	57.0	73.0	88.0	94.0
M96225-4	S19777.D	62.0	62.0	82.0	60.0	72.0	69.0
M96225-5	S19778.D	66.0	67.0	83.0	66.0	76.0	71.0
M96225-6	S19779.D	59.0	61.0	72.0	50.0	64.0	40.0
M96225-7	S19780.D	66.0	67.0	88.0	65.0	77.0	72.0
M96225-8	S19781.D	61.0	62.0	77.0	56.0	70.0	61.0
OP23515-BS	S19764.D	69.0	72.0	84.0	70.0	76.0	96.0
OP23515-BSD	S19765.D	62.0	66.0	77.0	63.0	70.0	86.0
OP23515-MB	S19763.D	60.0	63.0	64.0	62.0	67.0	86.0
OP23515-MS	S19766.D	62.0	64.0	82.0	56.0	68.0	84.0
OP23515-MSD	S19767.D	55.0	56.0	77.0	51.0	63.0	75.0

Surrogate Compounds

Recovery Limits

S1 = 2-Fluorophenol	30-130%
S2 = Phenol-d5	30-130%
S3 = 2,4,6-Tribromophenol	30-130%
S4 = Nitrobenzene-d5	30-130%
S5 = 2-Fluorobiphenyl	30-130%
S6 = Terphenyl-d14	30-130%

6.5.1

6

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Page 1 of 1

Job Number: M96225

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GBH926-MB	BH17783.D	1	12/06/10	AP	n/a	n/a	GBH926

The QC reported here applies to the following samples:

Method: MADEP VPH REV 1.1

M96225-1, M96225-2, M96225-3, M96225-4, M96225-5, M96225-6, M96225-8

CAS No.	Compound	Result	RL	Units	Q
	C5- C8 Aliphatics (Unadj.)	ND	5000	ug/kg	
	C9- C12 Aliphatics (Unadj.)	ND	5000	ug/kg	
	C9- C10 Aromatics (Unadj.)	ND	5000	ug/kg	
	C5- C8 Aliphatics	ND	5000	ug/kg	
	C9- C12 Aliphatics	ND	5000	ug/kg	

CAS No.	Surrogate Recoveries		Limits
615-59-8	2,5-Dibromotoluene	82%	70-130%
615-59-8	2,5-Dibromotoluene	77%	70-130%

Method Blank Summary

Page 1 of 1

Job Number: M96225

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GBH929-MB	BH17817.D	1	12/07/10	WS	n/a	n/a	GBH929

The QC reported here applies to the following samples:

Method: MADEP VPH REV 1.1

M96225-7

CAS No.	Compound	Result	RL	Units	Q
	C5- C8 Aliphatics (Unadj.)	ND	5000	ug/kg	
	C9- C12 Aliphatics (Unadj.)	ND	5000	ug/kg	
	C9- C10 Aromatics (Unadj.)	ND	5000	ug/kg	
	C5- C8 Aliphatics	ND	5000	ug/kg	
	C9- C12 Aliphatics	ND	5000	ug/kg	

CAS No.	Surrogate Recoveries	Limits
615-59-8	2,5-Dibromotoluene	72% 70-130%
615-59-8	2,5-Dibromotoluene	70% 70-130%

7.1.2

7

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 1

Job Number: M96225

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GBH926-BSP	BH17784.D	1	12/06/10	AP	n/a	n/a	GBH926
GBH926-BSD	BH17785.D	1	12/06/10	AP	n/a	n/a	GBH926

The QC reported here applies to the following samples:

Method: MADEP VPH REV 1.1

M96225-1, M96225-2, M96225-3, M96225-4, M96225-5, M96225-6, M96225-8

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
	C5- C8 Aliphatics (Unadj.)	7500	5550	74	5590	75	1	70-130/25
	C9- C12 Aliphatics (Unadj.)	7500	8220	110	8300	111	1	70-130/25
	C9- C10 Aromatics (Unadj.)	2500	2520	101	2550	102	1	70-130/25

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
615-59-8	2,5-Dibromotoluene	101%	107%	70-130%
615-59-8	2,5-Dibromotoluene	96%	102%	70-130%

Blank Spike/Blank Spike Duplicate Summary

Job Number: M96225
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GBH929-BSP1	BH17820.D	1	12/07/10	WS	n/a	n/a	GBH929
GBH929-BSD1	BH17819.D	1	12/07/10	WS	n/a	n/a	GBH929

The QC reported here applies to the following samples: Method: MADEP VPH REV 1.1

M96225-7

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
	C5- C8 Aliphatics (Unadj.)	7500	5540	74	5650	75	2	70-130/25
	C9- C12 Aliphatics (Unadj.)	7500	8160	109	8220	110	1	70-130/25
	C9- C10 Aromatics (Unadj.)	2500	2620	105	2600	104	1	70-130/25

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
615-59-8	2,5-Dibromotoluene	83%	93%	70-130%
615-59-8	2,5-Dibromotoluene	80%	89%	70-130%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M96225
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M96285-3MS	BH17841.D	1	12/08/10	WS	n/a	n/a	GBH929
M96285-3MSD	BH17842.D	1	12/08/10	WS	n/a	n/a	GBH929
M96285-3	BH17840.D	1	12/08/10	WS	n/a	n/a	GBH929

The QC reported here applies to the following samples: Method: MADEP VPH REV 1.1

M96225-7

CAS No.	Compound	M96285-3 ug/kg	Spike Q	ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
---------	----------	-------------------	------------	-------	-------------	---------	--------------	----------	-----	-------------------

CAS No.	Surrogate Recoveries	MS	MSD	M96285-3	Limits
615-59-8	2,5-Dibromotoluene	125%	122%	109%	70-130%
615-59-8	2,5-Dibromotoluene	122%	118%	104%	70-130%

Volatile Surrogate Recovery Summary

Page 1 of 1

Job Number: M96225
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Method: MADEP VPH REV 1.1 **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a	S1 ^b
M96225-1	BH17792.D	96.0	89.0
M96225-2	BH17822.D	62.0* ^c	56.0* ^c
M96225-2	BH17793.D	70.0	66.0* ^c
M96225-3	BH17821.D	64.0* ^c	58.0* ^c
M96225-3	BH17794.D	72.0	63.0* ^c
M96225-4	BH17795.D	103.0	95.0
M96225-5	BH17796.D	92.0	84.0
M96225-6	BH17797.D	100.0	93.0
M96225-7	BH17823.D	77.0	72.0
M96225-8	BH17799.D	121.0	110.0
GBH926-BSD	BH17785.D	107.0	102.0
GBH926-BSP	BH17784.D	101.0	96.0
GBH926-MB	BH17783.D	82.0	77.0
GBH929-BSD1	BH17819.D	93.0	89.0
GBH929-BSP1	BH17820.D	83.0	80.0
GBH929-MB	BH17817.D	72.0	70.0
M96285-3MS	BH17841.D	125.0	122.0
M96285-3MSD	BH17842.D	122.0	118.0

Surrogate Compounds	Recovery Limits
------------------------	--------------------

S1 = 2,5-Dibromotoluene	70-130%
-------------------------	---------

(a) Recovery from GC signal #1

(b) Recovery from GC signal #2

(c) Outside control limits due to possible matrix interference. Confirmed by reanalysis.

7.4.1

7

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Page 1 of 1

Job Number: M96225

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23506-MB	BI2592.D	1	12/07/10	JD	12/02/10	OP23506	GBI98

The QC reported here applies to the following samples:

Method: MADEP EPH REV 1.1

M96225-1, M96225-2, M96225-3, M96225-4, M96225-5, M96225-6, M96225-7, M96225-8

CAS No.	Compound	Result	RL	Units	Q
	C11-C22 Aromatics (Unadj.)	ND	18000	ug/kg	
	C9-C18 Aliphatics	ND	9000	ug/kg	
	C19-C36 Aliphatics	ND	9000	ug/kg	
	C11-C22 Aromatics	ND	18000	ug/kg	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	74% 40-140%
321-60-8	2-Fluorobiphenyl	85% 40-140%
580-13-2	2-Bromonaphthalene	51% 40-140%
3386-33-2	1-Chlorooctadecane	52% 40-140%

8.1.1

8

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 1

Job Number: M96225

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23506-BS	BI2590.D	1	12/07/10	JD	12/02/10	OP23506	GBI98
OP23506-BSD	BI2591.D	1	12/07/10	JD	12/02/10	OP23506	GBI98

The QC reported here applies to the following samples:

Method: MADEP EPH REV 1.1

M96225-1, M96225-2, M96225-3, M96225-4, M96225-5, M96225-6, M96225-7, M96225-8

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
	C11-C22 Aromatics (Unadj.)	71900	68400	95 ^a	76100	106 ^a	11	40-140/25
	C9-C18 Aliphatics	27000	12200	45	11000	41	10	40-140/25
	C19-C36 Aliphatics	36000	20400	57	19900	55	2	40-140/25

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
84-15-1	o-Terphenyl	76%	86%	40-140%
321-60-8	2-Fluorobiphenyl	85%	97%	40-140%
580-13-2	2-Bromonaphthalene	64%	67%	40-140%
3386-33-2	1-Chlorooctadecane	44%	44%	40-140%

Sample	Compound	Col #1	Col #2	Breakthrough	Limit
OP23506-BS	2-Methylnaphthalene	2430	270	10.0% *	5.0
OP23506-BS	Naphthalene	2060	381	15.6% *	5.0
OP23506-BSD	2-Methylnaphthalene	2470	456	15.6% *	5.0
OP23506-BSD	Naphthalene	2090	567	21.3% *	5.0

(a) Aromatic breakthrough (naphthalene and/or 2-methylnaphthalene) exceeded 5% method limit. Results confirmed by refractionation.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M96225
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23506-MS	BI2548.D	1	12/04/10	JD	12/02/10	OP23506	GBI96
OP23506-MSD	BI2549.D	1	12/04/10	JD	12/02/10	OP23506	GBI96
M96225-8	BI2558.D	1	12/05/10	JD	12/02/10	OP23506	GBI96

The QC reported here applies to the following samples: Method: MADEP EPH REV 1.1

M96225-1, M96225-2, M96225-3, M96225-4, M96225-5, M96225-6, M96225-7, M96225-8

CAS No.	Compound	M96225-8 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
	C11-C22 Aromatics (Unadj.)	494000		95600	745000	263* a	684000	203* a	9	40-140/25
	C9-C18 Aliphatics	31500		35900	65000	93	66500	100	2	40-140/25
	C19-C36 Aliphatics	123000		47800	170000	98	160000	79	6	40-140/25

CAS No.	Surrogate Recoveries	MS	MSD	M96225-8	Limits
84-15-1	o-Terphenyl	154% * b	156% * b	128%	40-140%
321-60-8	2-Fluorobiphenyl	89%	93%	91%	40-140%
580-13-2	2-Bromonaphthalene	86%	72%	88%	40-140%
3386-33-2	1-Chlorooctadecane	56%	60%	51%	40-140%

- (a) Outside control limits due to high level in sample relative to spike amount.
(b) Outside control limits due to matrix interference. Confirmed by reanalysis.

Semivolatile Surrogate Recovery Summary

Page 1 of 1

Job Number: M96225
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Method: MADEP EPH REV 1.1 **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a	S2 ^a	S3 ^a	S4 ^b
M96225-1	BI2550.D	142.0* ^c	73.0	42.0	70.0
M96225-2	BI2552.D	98.0	103.0	99.0	51.0
M96225-3	BI2553.D	318.0* ^c	88.0	72.0	71.0
M96225-4	BI2554.D	80.0	98.0	94.0	44.0
M96225-5	BI2555.D	127.0	96.0	78.0	66.0
M96225-6	BI2556.D	56.0	110.0	86.0	11.0* ^d
M96225-7	BI2557.D	135.0	93.0	61.0	76.0
M96225-8	BI2558.D	128.0	91.0	88.0	51.0
OP23506-BS	BI2590.D	76.0	85.0	64.0	44.0
OP23506-BSD	BI2591.D	86.0	97.0	67.0	44.0
OP23506-MB	BI2592.D	74.0	85.0	51.0	52.0
OP23506-MS	BI2548.D	154.0* ^e	89.0	86.0	56.0
OP23506-MSD	BI2549.D	156.0* ^e	93.0	72.0	60.0

Surrogate Compounds Recovery Limits

S1 = o-Terphenyl	40-140%
S2 = 2-Fluorobiphenyl	40-140%
S3 = 2-Bromonaphthalene	40-140%
S4 = 1-Chlorooctadecane	40-140%

- (a) Recovery from GC signal #1
(b) Recovery from GC signal #2
(c) Outside control limits due to possible matrix interference.
(d) Outside control limits due to possible matrix interference. Confirmed by refractionation.
(e) Outside control limits due to matrix interference. Confirmed by reanalysis.

8.4.1
8

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M96225
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16325
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 12/01/10

Metal	RL	IDL	MDL	MB raw	final
Aluminum	20	1.5	1.5		
Antimony	1.0	.09	.12	-0.020	<1.0
Arsenic	1.0	.1	.13	-0.040	<1.0
Barium	5.0	.042	.2	0.18	<5.0
Beryllium	0.40	.014	.015	0.0	<0.40
Boron	10	.033	.12		
Cadmium	0.40	.011	.017	-0.010	<0.40
Calcium	500	2.3	2.3		
Chromium	1.0	.047	.047	0.020	<1.0
Cobalt	5.0	.017	.017		
Copper	2.5	.086	.15		
Gold	5.0	.16	.16		
Iron	10	.39	.54		
Lead	1.0	.15	.15	-0.020	<1.0
Magnesium	500	3.7	4.2		
Manganese	1.5	.011	.092		
Molybdenum	10	.021	.026		
Nickel	4.0	.021	.028	-0.010	<4.0
Palladium	5.0	.24	.24		
Platinum	5.0	.73	.73		
Potassium	500	2.9	3.6		
Selenium	1.0	.11	.19	0.15	<1.0
Silicon	10	.12	.47		
Silver	0.50	.06	.06	0.010	<0.50
Sodium	500	1.5	4.2		
Strontium	1.0	.013	.015		
Thallium	1.0	.07	.12	0.090	<1.0
Tin	10	.036	.036		
Titanium	5.0	.057	.057		
Tungsten	10	.48	.57		
Vanadium	1.0	.073	.073	-0.020	<1.0
Zinc	2.0	.024	.28	0.17	<2.0

Associated samples MP16325: M96225-1, M96225-2, M96225-3, M96225-4, M96225-5, M96225-6, M96225-7

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M96225
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16325
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M96225
 Account: HALEYALD - Haley & Aldrich
 Project: Former Energy International Parcel, MA

QC Batch ID: MP16325
 Matrix Type: SOLID

Methods: SW846 6010C
 Units: mg/kg

Prep Date: 12/01/10 12/01/10

Metal	M96199-5 Original MS		Spikelot MPICP	% Rec	QC Limits	M96199-5 Original DUP		RPD	QC Limits
Aluminum									
Antimony	2.4	17.3	41.9	35.6 (a)	75-125	2.4	1.4	52.6 (c)	0-20
Arsenic	18.9	56.7	41.9	90.3	75-125	18.9	18.3	3.2	0-20
Barium	198	273	168	44.8 (a)	75-125	198	115	53.0 (c)	0-20
Beryllium	0.65	35.1	41.9	82.3	75-125	0.65	0.63	3.1	0-20
Boron									
Cadmium	0.54	40.0	41.9	94.2	75-125	0.54	0.51	5.7	0-20
Calcium									
Chromium	17.6	50.8	41.9	79.3	75-125	17.6	15.6	12.0	0-20
Cobalt									
Copper									
Gold									
Iron									
Lead	912	965	83.8	63.3 (b)	75-125	912	940	3.0	0-20
Magnesium									
Manganese									
Molybdenum									
Nickel	15.4	52.6	41.9	88.8	75-125	15.4	15.2	1.3	0-20
Palladium									
Platinum									
Potassium									
Selenium	0.97	37.4	41.9	87.0	75-125	0.97	1.1	12.6	0-20
Silicon									
Silver	0.30	16.2	16.8	94.9	75-125	0.30	0.28	6.9	0-20
Sodium									
Strontium									
Thallium	0.0	35.7	41.9	85.2	75-125	0.0	0.14	200.0(d)	0-20
Tin									
Titanium									
Tungsten									
Vanadium	24.6	63.7	41.9	93.4	75-125	24.6	26.1	5.9	0-20
Zinc	145	183	41.9	90.7	75-125	145	143	1.4	0-20

Associated samples MP16325: M96225-1, M96225-2, M96225-3, M96225-4, M96225-5, M96225-6, M96225-7

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M96225
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16325
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes

- (*) Outside of QC limits
- (N) Matrix Spike Rec. outside of QC limits
- (anr) Analyte not requested
- (a) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity. Post spike is not within acceptable range.
- (b) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
- (c) High RPD due to possible matrix interference and/or sample non-homogeneity.
- (d) RPD acceptable due to low duplicate and sample concentrations.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M96225
 Account: HALEYALD - Haley & Aldrich
 Project: Former Energy International Parcel, MA

QC Batch ID: MP16325
 Matrix Type: SOLID

Methods: SW846 6010C
 Units: mg/kg

Prep Date: 12/01/10

12/01/10

Metal	BSP Result	Spikelot MPICP	% Rec	QC Limits	BSD Result	Spikelot MPICP	% Rec	BSD RPD	QC Limit
Aluminum									
Antimony	50.2	50	100.4	80-120	49.5	50	99.0	1.4	20
Arsenic	50.5	50	101.0	80-120	49.4	50	98.8	2.2	20
Barium	184	200	92.0	80-120	182	200	91.0	1.1	20
Beryllium	45.5	50	91.0	80-120	45.4	50	90.8	0.2	20
Boron									
Cadmium	51.8	50	103.6	80-120	50.8	50	101.6	1.9	20
Calcium									
Chromium	49.4	50	98.8	80-120	49.3	50	98.6	0.2	20
Cobalt									
Copper									
Gold									
Iron									
Lead	98.1	100	98.1	80-120	96.7	100	96.7	1.4	20
Magnesium									
Manganese									
Molybdenum									
Nickel	50.8	50	101.6	80-120	50.0	50	100.0	1.6	20
Palladium									
Platinum									
Potassium									
Selenium	50.7	50	101.4	80-120	49.9	50	99.8	1.6	20
Silicon									
Silver	20.6	20	103.0	80-120	20.8	20	104.0	1.0	20
Sodium									
Strontium									
Thallium	51.3	50	102.6	80-120	50.3	50	100.6	2.0	20
Tin									
Titanium									
Tungsten									
Vanadium	51.4	50	102.8	80-120	51.5	50	103.0	0.2	20
Zinc	50.2	50	100.4	80-120	49.2	50	98.4	2.0	20

Associated samples MP16325: M96225-1, M96225-2, M96225-3, M96225-4, M96225-5, M96225-6, M96225-7

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M96225
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16325
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M96225
 Account: HALEYALD - Haley & Aldrich
 Project: Former Energy International Parcel, MA

QC Batch ID: MP16325
 Matrix Type: SOLID

Methods: SW846 6010C
 Units: mg/kg

Prep Date: 12/01/10

Metal	LCS Result	Spikelot MPLCS70	% Rec	QC Limits
Aluminum				
Antimony	80.9	121	66.9	8-219
Arsenic	105	109	96.3	83-117
Barium	279	325	85.8	83-117
Beryllium	80.5	92.1	87.4	84-116
Boron				
Cadmium	111	110	100.9	81-119
Calcium				
Chromium	86.0	93.4	92.1	81-120
Cobalt				
Copper				
Gold				
Iron				
Lead	139	152	91.4	79-121
Magnesium				
Manganese				
Molybdenum				
Nickel	108	109	99.1	81-118
Palladium				
Platinum				
Potassium				
Selenium	201	207	97.1	79-120
Silicon				
Silver	52.3	51.9	100.8	66-134
Sodium				
Strontium				
Thallium	167	171	97.7	78-122
Tin				
Titanium				
Tungsten				
Vanadium	105	110	95.5	77-124
Zinc	279	299	93.3	82-118

Associated samples MP16325: M96225-1, M96225-2, M96225-3, M96225-4, M96225-5, M96225-6, M96225-7

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M96225
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16325
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: M96225
 Account: HALEYALD - Haley & Aldrich
 Project: Former Energy International Parcel, MA

QC Batch ID: MP16325
 Matrix Type: SOLID

Methods: SW846 6010C
 Units: ug/l

Prep Date: 12/01/10

Metal	M96199-5 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony	27.9	24.3	12.9 (a)	0-10
Arsenic	223	242	8.3	0-10
Barium	2350	2440	3.7	0-10
Beryllium	7.70	7.90	2.6	0-10
Boron				
Cadmium	6.40	6.60	3.1	0-10
Calcium				
Chromium	208	231	11.1 (b)	0-10
Cobalt				
Copper				
Gold				
Iron				
Lead	10800	11900	9.8	0-10
Magnesium				
Manganese				
Molybdenum				
Nickel	183	203	11.2 (b)	0-10
Palladium				
Platinum				
Potassium				
Selenium	11.5	15.1	31.3 (a)	0-10
Silicon				
Silver	3.50	4.60	31.4 (a)	0-10
Sodium				
Strontium				
Thallium	0.00	0.00	NC	0-10
Tin				
Titanium				
Tungsten				
Vanadium	291	316	8.7	0-10
Zinc	1720	1950	13.3 (b)	0-10

Associated samples MP16325: M96225-1, M96225-2, M96225-3, M96225-4, M96225-5, M96225-6, M96225-7

SERIAL DILUTION RESULTS SUMMARY

Login Number: M96225
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16325
Matrix Type: SOLID

Methods: SW846 6010C
Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

(b) Serial dilution indicates possible matrix interference.

9.1.4

9

POST DIGESTATE SPIKE SUMMARY

Login Number: M96225
 Account: HALEYALD - Haley & Aldrich
 Project: Former Energy International Parcel, MA

QC Batch ID: MP16325
 Matrix Type: SOLID

Methods: SW846 6010C
 Units: ug/l

Prep Date: 12/01/10

Metal	Sample ml	Final ml	M96199-5 Raw	PS Corr.** ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum									
Antimony	9.9	10.1	27.9	27.34752	84.6	.1	5	49.50495	115.7 -
Arsenic									
Barium	9.9	10.1	2350	2303.465	5911	.1	470	4653.465	77.5 -
Beryllium									
Boron									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Gold									
Iron									
Lead									
Magnesium									
Manganese									
Molybdenum									
Nickel									
Palladium									
Platinum									
Potassium									
Selenium									
Silicon									
Silver									
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Tungsten									
Vanadium									
Zinc									

Associated samples MP16325: M96225-1, M96225-2, M96225-3, M96225-4, M96225-5, M96225-6, M96225-7

POST DIGESTATE SPIKE SUMMARY

Login Number: M96225
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16325
Matrix Type: SOLID

Methods: SW846 6010C
Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(**) Corr. sample result = Raw * (sample volume / final volume)
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M96225
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16330
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 12/02/10

Metal	RL	IDL	MDL	MB raw	final
Aluminum	20	1.5	1.5		
Antimony	1.0	.09	.12	0.0	<1.0
Arsenic	1.0	.1	.13	-0.040	<1.0
Barium	5.0	.042	.2	0.20	<5.0
Beryllium	0.40	.014	.015	0.010	<0.40
Boron	10	.033	.12		
Cadmium	0.40	.011	.017	0.010	<0.40
Calcium	500	2.3	2.3		
Chromium	1.0	.047	.047	0.050	<1.0
Cobalt	5.0	.017	.017		
Copper	2.5	.086	.15		
Gold	5.0	.16	.16		
Iron	10	.39	.54		
Lead	1.0	.15	.15	0.050	<1.0
Magnesium	500	3.7	4.2		
Manganese	1.5	.011	.092		
Molybdenum	10	.021	.026		
Nickel	4.0	.021	.028	0.010	<4.0
Palladium	5.0	.24	.24		
Platinum	5.0	.73	.73		
Potassium	500	2.9	3.6		
Selenium	1.0	.11	.19	0.040	<1.0
Silicon	10	.12	.47		
Silver	0.50	.06	.06	0.0	<0.50
Sodium	500	1.5	4.2		
Strontium	1.0	.013	.015		
Thallium	1.0	.07	.12	0.040	<1.0
Tin	10	.036	.036		
Titanium	5.0	.057	.057		
Tungsten	10	.48	.57		
Vanadium	1.0	.073	.073	-0.010	<1.0
Zinc	2.0	.024	.28	0.10	<2.0

Associated samples MP16330: M96225-8

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M96225
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16330
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M96225
 Account: HALEYALD - Haley & Aldrich
 Project: Former Energy International Parcel, MA

QC Batch ID: MP16330
 Matrix Type: SOLID

Methods: SW846 6010C
 Units: mg/kg

Prep Date: 12/02/10 12/02/10

Metal	M96225-8 Original MS		Spikelot MPICP	% Rec	QC Limits	M96225-8 Original DUP		RPD	QC Limits
Aluminum									
Antimony	0.52	20.5	51.2	39.0 (a)	75-125	0.52	0.22	81.1 (b)	0-20
Arsenic	7.8	52.9	51.2	88.1	75-125	7.8	7.9	1.3	0-20
Barium	165	363	205	96.6	75-125	165	169	2.4	0-20
Beryllium	0.50	45.5	51.2	87.9	75-125	0.50	0.53	5.8	0-20
Boron									
Cadmium	0.25	47.1	51.2	91.5	75-125	0.25	0.25	0.0	0-20
Calcium									
Chromium	20.6	64.7	51.2	86.1	75-125	20.6	19.6	5.0	0-20
Cobalt									
Copper									
Gold									
Iron									
Lead	338	374	102	35.1 (a)	75-125	338	302	11.3	0-20
Magnesium									
Manganese									
Molybdenum									
Nickel	15.5	58.5	51.2	84.0	75-125	15.5	14.7	5.3	0-20
Palladium									
Platinum									
Potassium									
Selenium	0.84	42.8	51.2	81.9	75-125	0.84	0.81	3.6	0-20
Silicon									
Silver	0.77	20.2	20.5	94.8	75-125	0.77	0.76	1.3	0-20
Sodium									
Strontium									
Thallium	0.0	43.5	51.2	84.9	75-125	0.0	0.0	NC	0-20
Tin									
Titanium									
Tungsten									
Vanadium	27.0	73.5	51.2	90.8	75-125	27.0	27.1	0.4	0-20
Zinc	198	243	51.2	87.9	75-125	198	200	1.0	0-20

Associated samples MP16330: M96225-8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M96225
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16330
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes

- (*) Outside of QC limits
- (N) Matrix Spike Rec. outside of QC limits
- (anr) Analyte not requested
- (a) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity. Post spike within acceptable range.
- (b) RPD acceptable due to low duplicate and sample concentrations.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M96225
 Account: HALEYALD - Haley & Aldrich
 Project: Former Energy International Parcel, MA

QC Batch ID: MP16330
 Matrix Type: SOLID

Methods: SW846 6010C
 Units: mg/kg

Prep Date: 12/02/10

12/02/10

Metal	BSP Result	Spikelot MPICP	% Rec	QC Limits	BSD Result	Spikelot MPICP	% Rec	BSD RPD	QC Limit
Aluminum									
Antimony	46.8	50	93.6	80-120	47.1	50	94.2	0.6	20
Arsenic	47.8	50	95.6	80-120	47.9	50	95.8	0.2	20
Barium	192	200	96.0	80-120	192	200	96.0	0.0	20
Beryllium	48.2	50	96.4	80-120	47.8	50	95.6	0.8	20
Boron									
Cadmium	49.5	50	99.0	80-120	49.8	50	99.6	0.6	20
Calcium									
Chromium	48.9	50	97.8	80-120	48.6	50	97.2	0.6	20
Cobalt									
Copper									
Gold									
Iron									
Lead	92.9	100	92.9	80-120	93.2	100	93.2	0.3	20
Magnesium									
Manganese									
Molybdenum									
Nickel	48.2	50	96.4	80-120	48.5	50	97.0	0.6	20
Palladium									
Platinum									
Potassium									
Selenium	47.8	50	95.6	80-120	48.0	50	96.0	0.4	20
Silicon									
Silver	20.5	20	102.5	80-120	20.3	20	101.5	1.0	20
Sodium									
Strontium									
Thallium	48.8	50	97.6	80-120	48.8	50	97.6	0.0	20
Tin									
Titanium									
Tungsten									
Vanadium	48.5	50	97.0	80-120	48.3	50	96.6	0.4	20
Zinc	47.9	50	95.8	80-120	48.1	50	96.2	0.4	20

Associated samples MP16330: M96225-8

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M96225
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16330
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M96225

Account: HALEYALD - Haley & Aldrich

Project: Former Energy International Parcel, MA

QC Batch ID: MP16330

Methods: SW846 6010C

Matrix Type: SOLID

Units: mg/kg

Prep Date: 12/02/10

Metal	LCS Result	Spikelot MPLCS70	% Rec	QC Limits
Aluminum				
Antimony	95.4	121	78.8	8-219
Arsenic	103	109	94.5	83-117
Barium	315	325	96.9	83-117
Beryllium	89.1	92.1	96.7	84-116
Boron				
Cadmium	111	110	100.9	81-119
Calcium				
Chromium	88.1	93.4	94.3	81-120
Cobalt				
Copper				
Gold				
Iron				
Lead	137	152	90.1	79-121
Magnesium				
Manganese				
Molybdenum				
Nickel	108	109	99.1	81-118
Palladium				
Platinum				
Potassium				
Selenium	197	207	95.2	79-120
Silicon				
Silver	54.1	51.9	104.2	66-134
Sodium				
Strontium				
Thallium	166	171	97.1	78-122
Tin				
Titanium				
Tungsten				
Vanadium	102	110	92.7	77-124
Zinc	280	299	93.6	82-118

Associated samples MP16330: M96225-8

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M96225
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16330
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: M96225
 Account: HALEYALD - Haley & Aldrich
 Project: Former Energy International Parcel, MA

QC Batch ID: MP16330
 Matrix Type: SOLID

Methods: SW846 6010C
 Units: ug/l

Prep Date: 12/02/10

Metal	M96225-8 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony	5.10	4.50	11.8 (a)	0-10
Arsenic	75.9	80.4	5.9	0-10
Barium	1610	1710	6.1	0-10
Beryllium	4.90	5.30	8.2	0-10
Boron				
Cadmium	2.40	2.30	4.2	0-10
Calcium				
Chromium	201	217	7.8	0-10
Cobalt				
Copper				
Gold				
Iron				
Lead	3300	3600	9.0	0-10
Magnesium				
Manganese				
Molybdenum				
Nickel	151	166	9.6	0-10
Palladium				
Platinum				
Potassium				
Selenium	8.20	8.80	7.3	0-10
Silicon				
Silver	7.50	7.70	2.7	0-10
Sodium				
Strontium				
Thallium	0.00	0.00	NC	0-10
Tin				
Titanium				
Tungsten				
Vanadium	264	283	7.1	0-10
Zinc	1930	2150	11.3 (b)	0-10

Associated samples MP16330: M96225-8

9.2.4
9

SERIAL DILUTION RESULTS SUMMARY

Login Number: M96225
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16330
Matrix Type: SOLID

Methods: SW846 6010C
Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

(b) Serial dilution indicates possible matrix interference.

POST DIGESTATE SPIKE SUMMARY

Login Number: M96225
 Account: HALEYALD - Haley & Aldrich
 Project: Former Energy International Parcel, MA

QC Batch ID: MP16330
 Matrix Type: SOLID

Methods: SW846 6010C
 Units: ug/l

Prep Date:

12/02/10

Metal	Sample ml	Final ml	M96225-8 Raw	PS Corr.** ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum									
Antimony	9.9	10	5.1	5.049	24.1	.1	2	20	95.3 -
Arsenic									
Barium									
Beryllium									
Boron									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Gold									
Iron									
Lead									
Magnesium									
Manganese									
Molybdenum									
Nickel									
Palladium									
Platinum									
Potassium									
Selenium									
Silicon									
Silver									
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Tungsten									
Vanadium									
Zinc									

Associated samples MP16330: M96225-8

POST DIGESTATE SPIKE SUMMARY

Login Number: M96225
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16330
Matrix Type: SOLID

Methods: SW846 6010C
Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(**) Corr. sample result = Raw * (sample volume / final volume)
(anr) Analyte not requested

POST DIGESTATE SPIKE SUMMARY

Login Number: M96225
 Account: HALEYALD - Haley & Aldrich
 Project: Former Energy International Parcel, MA

QC Batch ID: MP16330
 Matrix Type: SOLID

Methods: SW846 6010C
 Units: ug/l

Prep Date:

12/02/10

Metal	Sample ml	Final ml	M96225-8 Raw	PS Corr.** ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Boron									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Gold									
Iron									
Lead	9.9	10	3303	3269.97	8789	.1	660	6600	83.6 -
Magnesium									
Manganese									
Molybdenum									
Nickel									
Palladium									
Platinum									
Potassium									
Selenium									
Silicon									
Silver									
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Tungsten									
Vanadium									
Zinc									

Associated samples MP16330: M96225-8

POST DIGESTATE SPIKE SUMMARY

Login Number: M96225
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16330
Matrix Type: SOLID

Methods: SW846 6010C
Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(**) Corr. sample result = Raw * (sample volume / final volume)
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M96225
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16331
Matrix Type: SOLID

Methods: SW846 7471A
Units: mg/kg

Prep Date: 12/03/10

Metal	RL	IDL	MDL	MB	
				raw	final
Mercury	0.033	.0047	.0055	0.011	<0.033

Associated samples MP16331: M96225-1, M96225-2, M96225-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M96225
 Account: HALEYALD - Haley & Aldrich
 Project: Former Energy International Parcel, MA

QC Batch ID: MP16331
 Matrix Type: SOLID

Methods: SW846 7471A
 Units: mg/kg

Prep Date: 12/03/10 12/03/10

Metal	M96199-5 Original	DUP	RPD	QC Limits	M96199-5 Original MS	Spikelot HGRWS1	% Rec	QC Limits
Mercury	0.53	0.65	20.3 (a)	0-20	0.53 1.2	0.518	129.3(b)	75-125

Associated samples MP16331: M96225-1, M96225-2, M96225-3

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) High RPD due to possible matrix interference and/or sample non-homogeneity.

(b) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M96225
 Account: HALEYALD - Haley & Aldrich
 Project: Former Energy International Parcel, MA

QC Batch ID: MP16331
 Matrix Type: SOLID

Methods: SW846 7471A
 Units: mg/kg

Prep Date: 12/03/10 12/03/10

Metal	BSP Result	Spikelot HGRWS1	% Rec	QC Limits	BSD Result	Spikelot HGRWS1	% Rec	BSD RPD	QC Limit
Mercury	0.47	0.5	94.0	80-120	0.47	0.5	94.0	0.0	30

Associated samples MP16331: M96225-1, M96225-2, M96225-3

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M96225
 Account: HALEYALD - Haley & Aldrich
 Project: Former Energy International Parcel, MA

QC Batch ID: MP16331
 Matrix Type: SOLID

Methods: SW846 7471A
 Units: mg/kg

Prep Date: 12/03/10

Metal	LCS Result	Spikelot HGLCS69	% Rec	QC Limits
-------	---------------	---------------------	-------	--------------

Mercury 14.9 16.3 91.4 71-129

Associated samples MP16331: M96225-1, M96225-2, M96225-3

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M96225
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16339
Matrix Type: LEACHATE

Methods: SW846 6010C
Units: mg/l

Prep Date: 12/07/10

Metal	RL	IDL	MDL	MB raw	final
Aluminum	0.20	.015	.015		
Antimony	0.0060	.0009	.0012		
Arsenic	0.010	.001	.0019		
Barium	0.50	.00042	.0037		
Beryllium	0.0040	.00014	.0002		
Boron	0.10	.00033	.0015		
Cadmium	0.0040	.00011	.00012		
Calcium	5.0	.023	.039		
Chromium	0.010	.00047	.00053		
Cobalt	0.050	.00017	.00028		
Copper	0.025	.00086	.00086		
Gold	0.050	.0016	.0017		
Iron	0.10	.0039	.0041		
Lead	0.010	.0015	.0015	0.00040	<0.010
Magnesium	5.0	.037	.037		
Manganese	0.015	.00011	.0009		
Molybdenum	0.10	.00021	.00064		
Nickel	0.040	.00021	.0003		
Palladium	0.050	.0024	.0025		
Platinum	0.050	.0073	.0073		
Potassium	5.0	.029	.03		
Selenium	0.010	.0011	.0017		
Silicon	0.10	.0012	.0072		
Silver	0.0050	.0006	.0006		
Sodium	5.0	.015	.031		
Strontium	0.010	.00013	.00031		
Thallium	0.0050	.0007	.00074		
Tin	0.10	.00036	.00043		
Titanium	0.050	.00057	.00057		
Tungsten	0.10	.0048	.012		
Vanadium	0.010	.00073	.0011		
Zinc	0.10	.00024	.002		

Associated samples MP16339: M96225-8A

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M96225
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16339
Matrix Type: LEACHATE

Methods: SW846 6010C
Units: mg/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M96225
 Account: HALEYALD - Haley & Aldrich
 Project: Former Energy International Parcel, MA

QC Batch ID: MP16339
 Matrix Type: LEACHATE

Methods: SW846 6010C
 Units: mg/l

Prep Date: 12/07/10 12/07/10

Metal	M96225-8A Original MS		Spikelot MPICP	% Rec	QC Limits	M96225-8A Original DUP		RPD	QC Limits
Aluminum									
Antimony									
Arsenic	anr								
Barium	anr								
Beryllium									
Boron									
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper									
Gold									
Iron									
Lead	0.50	1.5	1.0	100.0	75-125	0.50	0.51	2.0	0-20
Magnesium									
Manganese									
Molybdenum									
Nickel	anr								
Palladium									
Platinum									
Potassium									
Selenium	anr								
Silicon									
Silver	anr								
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Tungsten									
Vanadium									
Zinc									

Associated samples MP16339: M96225-8A

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M96225
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16339
Matrix Type: LEACHATE

Methods: SW846 6010C
Units: mg/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M96225
 Account: HALEYALD - Haley & Aldrich
 Project: Former Energy International Parcel, MA

QC Batch ID: MP16339
 Matrix Type: LEACHATE

Methods: SW846 6010C
 Units: mg/l

Prep Date: 12/07/10 12/07/10

Metal	BSP Result	Spikelot MPICP	% Rec	QC Limits	BSD Result	Spikelot MPICP	% Rec	BSD RPD	QC Limit
Aluminum									
Antimony									
Arsenic	anr								
Barium	anr								
Beryllium									
Boron									
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper									
Gold									
Iron									
Lead	0.95	1.0	95.0	80-120	0.94	1.0	94.0	1.1	20
Magnesium									
Manganese									
Molybdenum									
Nickel	anr								
Palladium									
Platinum									
Potassium									
Selenium	anr								
Silicon									
Silver	anr								
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Tungsten									
Vanadium									
Zinc									

Associated samples MP16339: M96225-8A

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M96225

Account: HALEYALD - Haley & Aldrich

Project: Former Energy International Parcel, MA

QC Batch ID: MP16339

Methods: SW846 6010C

Matrix Type: LEACHATE

Units: mg/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: M96225
 Account: HALEYALD - Haley & Aldrich
 Project: Former Energy International Parcel, MA

QC Batch ID: MP16339
 Matrix Type: LEACHATE

Methods: SW846 6010C
 Units: ug/l

Prep Date: 12/07/10

Metal	M96225-8A Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic	anr			
Barium	anr			
Beryllium				
Boron				
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt				
Copper				
Gold				
Iron				
Lead	503	520	3.4	0-10
Magnesium				
Manganese				
Molybdenum				
Nickel	anr			
Palladium				
Platinum				
Potassium				
Selenium	anr			
Silicon				
Silver	anr			
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Tungsten				
Vanadium				
Zinc				

Associated samples MP16339: M96225-8A

SERIAL DILUTION RESULTS SUMMARY

Login Number: M96225
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16339
Matrix Type: LEACHATE

Methods: SW846 6010C
Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

9.4.4

9

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M96225
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16345
Matrix Type: SOLID

Methods: SW846 7471A
Units: mg/kg

Prep Date: 12/07/10

Metal	RL	IDL	MDL	MB	
				raw	final
Mercury	0.033	.0047	.0055	0.0058	<0.033

Associated samples MP16345: M96225-4, M96225-5, M96225-6, M96225-7, M96225-8

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M96225
 Account: HALEYALD - Haley & Aldrich
 Project: Former Energy International Parcel, MA

QC Batch ID: MP16345
 Matrix Type: SOLID

Methods: SW846 7471A
 Units: mg/kg

Prep Date: 12/07/10 12/07/10

Metal	M96225-8 Original MS		Spikelot HGRWS1	% Rec	QC Limits	M96225-8 Original DUP		RPD	QC Limits
Mercury	1.8	2.6	0.545	146.8(a)	75-125	1.8	1.5	18.2	0-20

Associated samples MP16345: M96225-4, M96225-5, M96225-6, M96225-7, M96225-8

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M96225
 Account: HALEYALD - Haley & Aldrich
 Project: Former Energy International Parcel, MA

QC Batch ID: MP16345
 Matrix Type: SOLID

Methods: SW846 7471A
 Units: mg/kg

Prep Date: 12/07/10 12/07/10

Metal	BSP Result	Spikelot HGRWS1	% Rec	QC Limits	BSD Result	Spikelot HGRWS1	% Rec	BSD RPD	QC Limit
Mercury	0.50	0.5	100.0	80-120	0.51	0.5	102.0	2.0	30

Associated samples MP16345: M96225-4, M96225-5, M96225-6, M96225-7, M96225-8

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M96225
 Account: HALEYALD - Haley & Aldrich
 Project: Former Energy International Parcel, MA

QC Batch ID: MP16345
 Matrix Type: SOLID

Methods: SW846 7471A
 Units: mg/kg

Prep Date: 12/07/10

Metal	LCS Result	Spikelot HGLCS69	% Rec	QC Limits
-------	---------------	---------------------	-------	--------------

Mercury	15.8	16.3	96.9	71-129
---------	------	------	------	--------

Associated samples MP16345: M96225-4, M96225-5, M96225-6, M96225-7, M96225-8

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M96225
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16354
Matrix Type: LEACHATE

Methods: SW846 6010C
Units: mg/l

Prep Date: 12/09/10

Metal	RL	IDL	MDL	MB raw	final
Aluminum	0.20	.015	.015		
Antimony	0.0060	.0009	.0012		
Arsenic	0.010	.001	.0019		
Barium	0.50	.00042	.0037		
Beryllium	0.0040	.00014	.0002		
Boron	0.10	.00033	.0015		
Cadmium	0.0040	.00011	.00012		
Calcium	5.0	.023	.039		
Chromium	0.010	.00047	.00053		
Cobalt	0.050	.00017	.00028		
Copper	0.025	.00086	.00086		
Gold	0.050	.0016	.0017		
Iron	0.10	.0039	.0041		
Lead	0.010	.0015	.0015	0.0013	<0.010
Magnesium	5.0	.037	.037		
Manganese	0.015	.00011	.0009		
Molybdenum	0.10	.00021	.00064		
Nickel	0.040	.00021	.0003		
Palladium	0.050	.0024	.0025		
Platinum	0.050	.0073	.0073		
Potassium	5.0	.029	.03		
Selenium	0.010	.0011	.0017		
Silicon	0.10	.0012	.0072		
Silver	0.0050	.0006	.0006		
Sodium	5.0	.015	.031		
Strontium	0.010	.00013	.00031		
Thallium	0.0050	.0007	.00074		
Tin	0.10	.00036	.00043		
Titanium	0.050	.00057	.00057		
Tungsten	0.10	.0048	.012		
Vanadium	0.010	.00073	.0011		
Zinc	0.10	.00024	.002		

Associated samples MP16354: M96225-1A, M96225-2A, M96225-3A, M96225-4A, M96225-5A, M96225-6A, M96225-7A

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M96225
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16354
Matrix Type: LEACHATE

Methods: SW846 6010C
Units: mg/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M96225
 Account: HALEYALD - Haley & Aldrich
 Project: Former Energy International Parcel, MA

QC Batch ID: MP16354
 Matrix Type: LEACHATE

Methods: SW846 6010C
 Units: mg/l

Prep Date: 12/09/10 12/09/10

Metal	M96199-5A Original MS		Spikelot MPICP	% Rec	QC Limits	M96199-5A Original DUP		RPD	QC Limits
Aluminum									
Antimony									
Arsenic	anr								
Barium	anr								
Beryllium									
Boron									
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper									
Gold									
Iron									
Lead	0.56	1.5	1.0	94.0	75-125	0.56	0.56	0.0	0-20
Magnesium									
Manganese									
Molybdenum									
Nickel									
Palladium									
Platinum									
Potassium									
Selenium	anr								
Silicon									
Silver	anr								
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Tungsten									
Vanadium									
Zinc									

Associated samples MP16354: M96225-1A, M96225-2A, M96225-3A, M96225-4A, M96225-5A, M96225-6A, M96225-7A

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M96225
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16354
Matrix Type: LEACHATE

Methods: SW846 6010C
Units: mg/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M96225
 Account: HALEYALD - Haley & Aldrich
 Project: Former Energy International Parcel, MA

QC Batch ID: MP16354
 Matrix Type: LEACHATE

Methods: SW846 6010C
 Units: mg/l

Prep Date: 12/09/10

Metal	M96289-4A Original LS	Spikelot MPICP	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic	anr			
Barium	anr			
Beryllium				
Boron				
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt				
Copper				
Gold				
Iron				
Lead	1.9	2.9	1.0	100.0
Magnesium				75-125
Manganese				
Molybdenum				
Nickel				
Palladium				
Platinum				
Potassium				
Selenium	anr			
Silicon				
Silver	anr			
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Tungsten				
Vanadium				
Zinc				

Associated samples MP16354: M96225-1A, M96225-2A, M96225-3A, M96225-4A, M96225-5A, M96225-6A, M96225-7A

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M96225
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16354
Matrix Type: LEACHATE

Methods: SW846 6010C
Units: mg/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M96225
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16354
Matrix Type: LEACHATE

Methods: SW846 6010C
Units: mg/l

Prep Date: 12/09/10

12/09/10

Metal	BSP Result	Spikelot MPICP	% Rec	QC Limits	BSD Result	Spikelot MPICP	% Rec	BSD RPD	QC Limit
Aluminum									
Antimony									
Arsenic	anr								
Barium	anr								
Beryllium									
Boron									
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper									
Gold									
Iron									
Lead	0.91	1.0	91.0	80-120	0.91	1.0	91.0	0.0	20
Magnesium									
Manganese									
Molybdenum									
Nickel									
Palladium									
Platinum									
Potassium									
Selenium	anr								
Silicon									
Silver	anr								
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Tungsten									
Vanadium									
Zinc									

Associated samples MP16354: M96225-1A, M96225-2A, M96225-3A, M96225-4A, M96225-5A, M96225-6A, M96225-7A

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M96225
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16354
Matrix Type: LEACHATE

Methods: SW846 6010C
Units: mg/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

9.6.3

9

SERIAL DILUTION RESULTS SUMMARY

Login Number: M96225
 Account: HALEYALD - Haley & Aldrich
 Project: Former Energy International Parcel, MA

QC Batch ID: MP16354
 Matrix Type: LEACHATE

Methods: SW846 6010C
 Units: ug/l

Prep Date: 12/09/10

Metal	M96199-5A Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic	anr			
Barium	anr			
Beryllium				
Boron				
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt				
Copper				
Gold				
Iron				
Lead	555	576	3.6	0-10
Magnesium				
Manganese				
Molybdenum				
Nickel				
Palladium				
Platinum				
Potassium				
Selenium	anr			
Silicon				
Silver	anr			
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Tungsten				
Vanadium				
Zinc				

Associated samples MP16354: M96225-1A, M96225-2A, M96225-3A, M96225-4A, M96225-5A, M96225-6A, M96225-7A

SERIAL DILUTION RESULTS SUMMARY

Login Number: M96225
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16354
Matrix Type: LEACHATE

Methods: SW846 6010C
Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

9.6.4

9

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M96225
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16357
Matrix Type: LEACHATE

Methods: SW846 7470A
Units: mg/l

Prep Date: 12/09/10

Metal	RL	IDL	MDL	MB	
				raw	final

Mercury	0.00020	.000022	.000048	0.000024	<0.00020
---------	---------	---------	---------	----------	----------

Associated samples MP16357: M96225-2A, M96225-4A

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

Login Number: M96225
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

Methods: SW846 7470A
Units: mg/l

12/09/10

Associated samples MP16357: M96225-2A, M96225-4A

(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M96225
 Account: HALEYALD - Haley & Aldrich
 Project: Former Energy International Parcel, MA

QC Batch ID: MP16357
 Matrix Type: LEACHATE

Methods: SW846 7470A
 Units: mg/l

Prep Date: 12/09/10 12/09/10

Metal	BSP Result	Spikelot HGRWS1	% Rec	QC Limits	BSD Result	Spikelot HGRWS1	% Rec	BSD RPD	QC Limit
Mercury	0.0032	0.0030	106.7	80-120	0.0032	0.0030	106.7	0.0	

Associated samples MP16357: M96225-2A, M96225-4A

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY
Login Number: M96225
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Cyanide Reactivity	GP12374/GN33632	1.5	<1.5	mg/kg	250	31.4	12.6	-%
Sulfide Reactivity	GP12375/GN33633	50	<50	mg/kg	450	400	88.9	-%

Associated Samples:

Batch GP12374: M96225-1, M96225-2, M96225-3, M96225-4, M96225-5, M96225-6, M96225-7, M96225-8

Batch GP12375: M96225-1, M96225-2, M96225-3, M96225-4, M96225-5, M96225-6, M96225-7, M96225-8

(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: M96225
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Corrosivity as pH	GN33617	M96225-8		7.7	7.7	0.0	0-%
Cyanide Reactivity	GP12374/GN33632	M96225-8	mg/kg	<2.0	<2.0	0.0	0-20%
Ignitability (Flashpoint)	GN33600	M96199-5	Deg. F	>230	>230	0.0	0-20%
Redox Potential Vs H2	GN33622	M96225-8	mv	426	423(a)	0.7(a)	0-20%
Solids, Percent	GN33605	M96225-8	%	73.4	72.1	1.8	0-20%
Solids, Percent	GN33609	M96200-13	%	81	79.8	1.5	0-20%
Sulfide Reactivity	GP12375/GN33633	M96225-8	mg/kg	<68	<68	0.0	0-20%

Associated Samples:

Batch GN33600: M96225-1, M96225-2, M96225-3, M96225-4, M96225-5, M96225-6, M96225-7, M96225-8
Batch GN33605: M96225-1, M96225-2, M96225-8

Batch GN33609: M96225-3, M96225-4, M96225-5, M96225-6, M96225-7

Batch GN33617: M96225-1, M96225-2, M96225-3, M96225-4, M96225-5, M96225-6, M96225-7, M96225-8

Batch GN33622: M96225-1, M96225-2, M96225-3, M96225-4, M96225-5, M96225-6, M96225-7, M96225-8

Batch GP12374: M96225-1, M96225-2, M96225-3, M96225-4, M96225-5, M96225-6, M96225-7, M96225-8

Batch GP12375: M96225-1, M96225-2, M96225-3, M96225-4, M96225-5, M96225-6, M96225-7, M96225-8

(*) Outside of QC limits

(a) Analysis requested after recommended holding time.

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: M96225
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Cyanide Reactivity	GP12374/GN33632	M96225-8	mg/kg	<2.0	341	41.3	12.1	-%
Sulfide Reactivity	GP12375/GN33633	M96225-8	mg/kg	<68	613	409	66.7	-%

Associated Samples:

Batch GP12374: M96225-1, M96225-2, M96225-3, M96225-4, M96225-5, M96225-6, M96225-7, M96225-8

Batch GP12375: M96225-1, M96225-2, M96225-3, M96225-4, M96225-5, M96225-6, M96225-7, M96225-8

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits



12/18/10

Technical Report for

Haley & Aldrich

Former Energy International Parcel, MA

06318-502

Accutest Job Number: M96226

Sampling Date: 11/30/10

Report to:

Haley & Aldrich

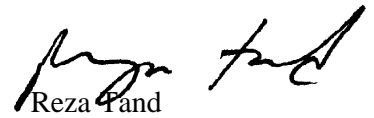
jkullmann@haleyaldrich.com

ATTN: Jane Kullmann

Total number of pages in report: **37**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.


Reza Fand
Lab Director

Client Service contact: Kristen Blanchard 508-481-6200

Certifications: MA (M-MA136, SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) ME (MA00136) FL (E87579) NY (11791) NJ (MA926) PA (6801121) ND (R-188) CO MN (11546AA) NC (653) IL (002337) ISO 17025:2005 (L2235)

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Table of Contents

-1-

Section 1: Sample Summary	3
Section 2: Case Narrative/Conformance Summary	6
Section 3: Sample Results	7
3.1: M96226-1: HA110_0-2'	8
3.2: M96226-2: HA110_2-4'	9
3.3: M96226-4: HA110_6-8'	10
3.4: M96226-10: HA109_0-2'	11
3.5: M96226-11: HA109_2-4'	12
3.6: M96226-13: HA109_6-8'	13
3.7: M96226-19: HA108_0-2'	14
3.8: M96226-20: HA108_2-4'	15
3.9: M96226-22: HA108_6-8'	16
3.10: M96226-26: HA107_0-2'	17
3.11: M96226-27: HA107_2-4'	18
3.12: M96226-29: HA107_6-8'	19
Section 4: Misc. Forms	20
4.1: Certification Exceptions	21
4.2: Chain of Custody	22
4.3: MCP Form	27
4.4: Sample Tracking Chronicle	28
Section 5: GC Semi-volatiles - QC Data Summaries	30
5.1: Method Blank Summary	31
5.2: Blank Spike Summary	33
5.3: Blank Spike/Blank Spike Duplicate Summary	34
5.4: Matrix Spike/Matrix Spike Duplicate Summary	35
5.5: Surrogate Recovery Summaries	37

Sample Summary

Haley & Aldrich

Job No: M96226

Former Energy International Parcel, MA
Project No: 06318-502

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
M96226-1	11/30/10	08:00 MD	11/30/10	SO	Soil	HA110_0-2'
M96226-2	11/30/10	08:00 MD	11/30/10	SO	Soil	HA110_2-4'
M96226-4	11/30/10	08:35 MD	11/30/10	SO	Soil	HA110_6-8'
M96226-5	11/30/10	08:45 MD	11/30/10	SO	Soil	HA110_8-10'
M96226-6	11/30/10	08:45 MD	11/30/10	SO	Soil	HA110_10-12'
M96226-7	11/30/10	09:10 MD	11/30/10	SO	Soil	HA110_12-14'
M96226-8	11/30/10	09:10 MD	11/30/10	SO	Soil	HA110_14-16'
M96226-9	11/30/10	09:25 MD	11/30/10	SO	Soil	HA110_16-18'
M96226-10	11/30/10	10:00 MD	11/30/10	SO	Soil	HA109_0-2'
M96226-11	11/30/10	10:00 MD	11/30/10	SO	Soil	HA109_2-4'
M96226-13	11/30/10	10:35 MD	11/30/10	SO	Soil	HA109_6-8'
M96226-14	11/30/10	10:55 MD	11/30/10	SO	Soil	HA109_8-10'
M96226-15	11/30/10	10:55 MD	11/30/10	SO	Soil	HA109_10-12'

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary

(continued)

Haley & Aldrich

Job No: M96226

Former Energy International Parcel, MA

Project No: 06318-502

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
M96226-16	11/30/10	11:30 MD	11/30/10	SO	Soil	HA109_12-14'
M96226-17	11/30/10	11:20 MD	11/30/10	SO	Soil	HA109_14-16.5'
M96226-18	11/30/10	11:50 MD	11/30/10	SO	Soil	HA109_16.5-18'
M96226-19	11/30/10	12:20 MD	11/30/10	SO	Soil	HA108_0-2'
M96226-20	11/30/10	12:25 MD	11/30/10	SO	Soil	HA108_2-4'
M96226-22	11/30/10	13:00 MD	11/30/10	SO	Soil	HA108_6-8'
M96226-23	11/30/10	13:40 MD	11/30/10	SO	Soil	HA108_8-10'
M96226-24	11/30/10	13:35 MD	11/30/10	SO	Soil	HA108_10-13'
M96226-25	11/30/10	13:50 MD	11/30/10	SO	Soil	HA108_13-16'
M96226-26	11/30/10	14:05 MD	11/30/10	SO	Soil	HA107_0-2'
M96226-27	11/30/10	14:10 MD	11/30/10	SO	Soil	HA107_2-4'
M96226-29	11/30/10	14:40 MD	11/30/10	SO	Soil	HA107_6-8'
M96226-30	11/30/10	15:00 MD	11/30/10	SO	Soil	HA107_8-10'

Soil samples reported on a dry weight basis unless otherwise indicated on result page.



Sample Summary
(continued)

Haley & Aldrich

Job No: M96226

Former Energy International Parcel, MA
Project No: 06318-502

Sample Number	Collected		Time By	Received	Matrix		Client Sample ID
	Date				Code	Type	
M96226-31	11/30/10	14:55	MD	11/30/10	SO	Soil	HA107_10-12'
M96226-32	11/30/10	15:25	MD	11/30/10	SO	Soil	HA107_12-14.5'
M96226-33	11/30/10	15:30	MD	11/30/10	SO	Soil	HA107_14.5-16'

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Haley & Aldrich

Job No M96226

Site: Former Energy International Parcel, MA

Report Date 12/18/2010 6:51:27 PM

12 Sample(s) were collected on 11/30/2010 and were received at Accutest on 11/30/2010 properly preserved, at 2.3 Deg. C and intact. These Samples received an Accutest job number of M96226. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Extractables by GC By Method SW846 8082

Matrix SO	Batch ID: OP23523
------------------	--------------------------

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) M96226-4MS, M96226-4MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for Aroclor 1260 are outside control limits. Outside control limits due to possible matrix interference.
- OP23523-MS for Tetrachloro-m-xylene, Decachlorobiphenyl: Outside control limits due to possible matrix interference.

Matrix SO	Batch ID: OP23621
------------------	--------------------------

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M96200-1MS, M96200-1MSD were used as the QC samples indicated.
- OP23621-MSD for Decachlorobiphenyl: Outside control limits due to possible matrix interference.
- M96226-1, M96226-2, M96226-27 for Aroclor 1260: Estimated value due to the presence of other Aroclor pattern.
- M96226-11, M96226-19 for Aroclor 1254: Estimated value due to the presence of other Aroclor pattern.
- M96226-11, M96226-19, M96226-20, M96226-12, M96226-10, M96226-27, OP23621-MS, OP23621-MSD for Decachlorobiphenyl: Outside control limits due to possible matrix interference.
- M96226-26 for Decachlorobiphenyl: Outside control limits due to possible matrix interference.

Wet Chemistry By Method SM21 2540 B MOD.

Matrix SO	Batch ID: GN33605
------------------	--------------------------

- Sample(s) M96225-8DUP were used as the QC samples for Solids, Percent.

Matrix SO	Batch ID: GN33609
------------------	--------------------------

- Sample(s) M96200-13DUP were used as the QC samples for Solids, Percent.

Matrix SO	Batch ID: GN33702
------------------	--------------------------

- Sample(s) M96200-2DUP were used as the QC samples for Solids, Percent.

The Accutest Laboratories of New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety. The Accutest Laboratories of NE, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report(M96226).

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	HA110_0-2'	Date Sampled:	11/30/10
Lab Sample ID:	M96226-1	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	85.1
Method:	SW846 8082 SW846 3540C		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ63145.D	1	12/18/10	CZ	12/13/10	OP23621	GYZ6278
Run #2							

	Initial Weight	Final Volume
Run #1	15.2 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	120	ug/kg	
11104-28-2	Aroclor 1221	ND	120	ug/kg	
11141-16-5	Aroclor 1232	ND	120	ug/kg	
53469-21-9	Aroclor 1242	ND	120	ug/kg	
12672-29-6	Aroclor 1248	ND	120	ug/kg	
11097-69-1	Aroclor 1254	172	120	ug/kg	
11096-82-5	Aroclor 1260 ^a	136	120	ug/kg	
37324-23-5	Aroclor 1262	ND	120	ug/kg	
11100-14-4	Aroclor 1268	ND	120	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	112%		30-150%
877-09-8	Tetrachloro-m-xylene	123%		30-150%
2051-24-3	Decachlorobiphenyl	150%		30-150%
2051-24-3	Decachlorobiphenyl	85%		30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA110_2-4'	Date Sampled:	11/30/10
Lab Sample ID:	M96226-2	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	89.0
Method:	SW846 8082 SW846 3540C		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ63147.D	1	12/18/10	CZ	12/13/10	OP23621	GYZ6278
Run #2							

	Initial Weight	Final Volume
Run #1	15.8 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	110	ug/kg	
11104-28-2	Aroclor 1221	ND	110	ug/kg	
11141-16-5	Aroclor 1232	ND	110	ug/kg	
53469-21-9	Aroclor 1242	ND	110	ug/kg	
12672-29-6	Aroclor 1248	ND	110	ug/kg	
11097-69-1	Aroclor 1254	549	110	ug/kg	
11096-82-5	Aroclor 1260 ^a	457	110	ug/kg	
37324-23-5	Aroclor 1262	ND	110	ug/kg	
11100-14-4	Aroclor 1268	ND	110	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	101%		30-150%
877-09-8	Tetrachloro-m-xylene	69%		30-150%
2051-24-3	Decachlorobiphenyl	489% ^b		30-150%
2051-24-3	Decachlorobiphenyl	149%		30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

(b) Outside control limits due to possible matrix interference.

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA110_6-8'	Date Sampled:	11/30/10
Lab Sample ID:	M96226-4	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	84.9
Method:	SW846 8082 SW846 3540C		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE22761.D	1	12/06/10	AP	12/03/10	OP23523	GBE1365
Run #2							

Run #	Initial Weight	Final Volume
Run #1	15.5 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	110	ug/kg	
11104-28-2	Aroclor 1221	ND	110	ug/kg	
11141-16-5	Aroclor 1232	ND	110	ug/kg	
53469-21-9	Aroclor 1242	ND	110	ug/kg	
12672-29-6	Aroclor 1248	ND	110	ug/kg	
11097-69-1	Aroclor 1254	ND	110	ug/kg	
11096-82-5	Aroclor 1260	ND	110	ug/kg	
37324-23-5	Aroclor 1262	ND	110	ug/kg	
11100-14-4	Aroclor 1268	ND	110	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	98%		30-150%
877-09-8	Tetrachloro-m-xylene	96%		30-150%
2051-24-3	Decachlorobiphenyl	101%		30-150%
2051-24-3	Decachlorobiphenyl	117%		30-150%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA109_0-2'	Date Sampled:	11/30/10
Lab Sample ID:	M96226-10	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	87.9
Method:	SW846 8082 SW846 3540C		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ63083.D	1	12/17/10	CZ	12/13/10	OP23621	GYZ2677
Run #2							

Run #	Initial Weight	Final Volume
Run #1	15.2 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	110	ug/kg	
11104-28-2	Aroclor 1221	ND	110	ug/kg	
11141-16-5	Aroclor 1232	ND	110	ug/kg	
53469-21-9	Aroclor 1242	ND	110	ug/kg	
12672-29-6	Aroclor 1248	ND	110	ug/kg	
11097-69-1	Aroclor 1254	ND	110	ug/kg	
11096-82-5	Aroclor 1260	ND	110	ug/kg	
37324-23-5	Aroclor 1262	ND	110	ug/kg	
11100-14-4	Aroclor 1268	ND	110	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	74%		30-150%
877-09-8	Tetrachloro-m-xylene	85%		30-150%
2051-24-3	Decachlorobiphenyl	438% ^a		30-150%
2051-24-3	Decachlorobiphenyl	30%		30-150%

(a) Outside control limits due to possible matrix interference.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA109_2-4'	Date Sampled:	11/30/10
Lab Sample ID:	M96226-11	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	83.6
Method:	SW846 8082 SW846 3540C		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ63086.D	1	12/17/10	CZ	12/13/10	OP23621	GYZ2677
Run #2							

Run #	Initial Weight	Final Volume
Run #1	15.7 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	110	ug/kg	
11104-28-2	Aroclor 1221	ND	110	ug/kg	
11141-16-5	Aroclor 1232	ND	110	ug/kg	
53469-21-9	Aroclor 1242	ND	110	ug/kg	
12672-29-6	Aroclor 1248	ND	110	ug/kg	
11097-69-1	Aroclor 1254 ^a	341	110	ug/kg	
11096-82-5	Aroclor 1260	353	110	ug/kg	
37324-23-5	Aroclor 1262	ND	110	ug/kg	
11100-14-4	Aroclor 1268	ND	110	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	91%		30-150%
877-09-8	Tetrachloro-m-xylene	55%		30-150%
2051-24-3	Decachlorobiphenyl	517% ^b		30-150%
2051-24-3	Decachlorobiphenyl	113%		30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

(b) Outside control limits due to possible matrix interference.

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA109_6-8'	Date Sampled:	11/30/10
Lab Sample ID:	M96226-13	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	87.0
Method:	SW846 8082 SW846 3540C		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE22768.D	1	12/06/10	AP	12/03/10	OP23523	GBE1365
Run #2							

	Initial Weight	Final Volume
Run #1	15.2 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	110	ug/kg	
11104-28-2	Aroclor 1221	ND	110	ug/kg	
11141-16-5	Aroclor 1232	ND	110	ug/kg	
53469-21-9	Aroclor 1242	ND	110	ug/kg	
12672-29-6	Aroclor 1248	ND	110	ug/kg	
11097-69-1	Aroclor 1254	115	110	ug/kg	
11096-82-5	Aroclor 1260	ND	110	ug/kg	
37324-23-5	Aroclor 1262	ND	110	ug/kg	
11100-14-4	Aroclor 1268	ND	110	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	72%		30-150%
877-09-8	Tetrachloro-m-xylene	77%		30-150%
2051-24-3	Decachlorobiphenyl	71%		30-150%
2051-24-3	Decachlorobiphenyl	75%		30-150%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA108_0-2'	Date Sampled:	11/30/10
Lab Sample ID:	M96226-19	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	85.1
Method:	SW846 8082 SW846 3540C		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ63088.D	1	12/17/10	CZ	12/13/10	OP23621	GYZ2677
Run #2							

	Initial Weight	Final Volume
Run #1	15.2 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	120	ug/kg	
11104-28-2	Aroclor 1221	ND	120	ug/kg	
11141-16-5	Aroclor 1232	ND	120	ug/kg	
53469-21-9	Aroclor 1242	ND	120	ug/kg	
12672-29-6	Aroclor 1248	ND	120	ug/kg	
11097-69-1	Aroclor 1254 ^a	242	120	ug/kg	
11096-82-5	Aroclor 1260	310	120	ug/kg	
37324-23-5	Aroclor 1262	ND	120	ug/kg	
11100-14-4	Aroclor 1268	ND	120	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	97%		30-150%
877-09-8	Tetrachloro-m-xylene	94%		30-150%
2051-24-3	Decachlorobiphenyl	607% ^b		30-150%
2051-24-3	Decachlorobiphenyl	140%		30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

(b) Outside control limits due to possible matrix interference.

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA108_2-4'	Date Sampled:	11/30/10
Lab Sample ID:	M96226-20	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	85.0
Method:	SW846 8082 SW846 3540C		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ63090.D	1	12/17/10	CZ	12/13/10	OP23621	GYZ2677
Run #2							

Run #	Initial Weight	Final Volume
Run #1	15.9 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	110	ug/kg	
11104-28-2	Aroclor 1221	ND	110	ug/kg	
11141-16-5	Aroclor 1232	ND	110	ug/kg	
53469-21-9	Aroclor 1242	ND	110	ug/kg	
12672-29-6	Aroclor 1248	ND	110	ug/kg	
11097-69-1	Aroclor 1254	244	110	ug/kg	
11096-82-5	Aroclor 1260	ND	110	ug/kg	
37324-23-5	Aroclor 1262	ND	110	ug/kg	
11100-14-4	Aroclor 1268	ND	110	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	92%		30-150%
877-09-8	Tetrachloro-m-xylene	121%		30-150%
2051-24-3	Decachlorobiphenyl	231% ^a		30-150%
2051-24-3	Decachlorobiphenyl	130%		30-150%

(a) Outside control limits due to possible matrix interference.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA108_6-8'	Date Sampled:	11/30/10
Lab Sample ID:	M96226-22	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	84.3
Method:	SW846 8082 SW846 3540C		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE22775.D	1	12/06/10	AP	12/03/10	OP23523	GBE1365
Run #2							

	Initial Weight	Final Volume
Run #1	15.2 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	120	ug/kg	
11104-28-2	Aroclor 1221	ND	120	ug/kg	
11141-16-5	Aroclor 1232	ND	120	ug/kg	
53469-21-9	Aroclor 1242	ND	120	ug/kg	
12672-29-6	Aroclor 1248	ND	120	ug/kg	
11097-69-1	Aroclor 1254	ND	120	ug/kg	
11096-82-5	Aroclor 1260	ND	120	ug/kg	
37324-23-5	Aroclor 1262	ND	120	ug/kg	
11100-14-4	Aroclor 1268	ND	120	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	106%		30-150%
877-09-8	Tetrachloro-m-xylene	106%		30-150%
2051-24-3	Decachlorobiphenyl	104%		30-150%
2051-24-3	Decachlorobiphenyl	106%		30-150%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA107_0-2'	Date Sampled:	11/30/10
Lab Sample ID:	M96226-26	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	92.7
Method:	SW846 8082 SW846 3540C		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ63092.D	1	12/17/10	CZ	12/13/10	OP23621	GYZ2677
Run #2							

Run #	Initial Weight	Final Volume
Run #1	15.2 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	110	ug/kg	
11104-28-2	Aroclor 1221	ND	110	ug/kg	
11141-16-5	Aroclor 1232	ND	110	ug/kg	
53469-21-9	Aroclor 1242	ND	110	ug/kg	
12672-29-6	Aroclor 1248	ND	110	ug/kg	
11097-69-1	Aroclor 1254	276	110	ug/kg	
11096-82-5	Aroclor 1260	ND	110	ug/kg	
37324-23-5	Aroclor 1262	ND	110	ug/kg	
11100-14-4	Aroclor 1268	ND	110	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	110%		30-150%
877-09-8	Tetrachloro-m-xylene	77%		30-150%
2051-24-3	Decachlorobiphenyl	488% ^a		30-150%
2051-24-3	Decachlorobiphenyl	145%		30-150%

(a) Outside control limits due to possible matrix interference.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA107_2-4'	Date Sampled:	11/30/10
Lab Sample ID:	M96226-27	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	85.0
Method:	SW846 8082 SW846 3540C		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ63094.D	1	12/17/10	CZ	12/13/10	OP23621	GYZ2677
Run #2							

Run #	Initial Weight	Final Volume
Run #1	15.0 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	120	ug/kg	
11104-28-2	Aroclor 1221	ND	120	ug/kg	
11141-16-5	Aroclor 1232	ND	120	ug/kg	
53469-21-9	Aroclor 1242	ND	120	ug/kg	
12672-29-6	Aroclor 1248	ND	120	ug/kg	
11097-69-1	Aroclor 1254	567	120	ug/kg	
11096-82-5	Aroclor 1260 ^a	463	120	ug/kg	
37324-23-5	Aroclor 1262	ND	120	ug/kg	
11100-14-4	Aroclor 1268	ND	120	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	101%		30-150%
877-09-8	Tetrachloro-m-xylene	128%		30-150%
2051-24-3	Decachlorobiphenyl	388% ^b		30-150%
2051-24-3	Decachlorobiphenyl	147%		30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

(b) Outside control limits due to possible matrix interference.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA107_6-8'	Date Sampled:	11/30/10
Lab Sample ID:	M96226-29	Date Received:	11/30/10
Matrix:	SO - Soil	Percent Solids:	68.6
Method:	SW846 8082 SW846 3540C		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE22779.D	1	12/06/10	AP	12/03/10	OP23523	GBE1365
Run #2							

Run #	Initial Weight	Final Volume
Run #1	15.4 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	140	ug/kg	
11104-28-2	Aroclor 1221	ND	140	ug/kg	
11141-16-5	Aroclor 1232	ND	140	ug/kg	
53469-21-9	Aroclor 1242	ND	140	ug/kg	
12672-29-6	Aroclor 1248	ND	140	ug/kg	
11097-69-1	Aroclor 1254	ND	140	ug/kg	
11096-82-5	Aroclor 1260	ND	140	ug/kg	
37324-23-5	Aroclor 1262	ND	140	ug/kg	
11100-14-4	Aroclor 1268	ND	140	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	93%		30-150%
877-09-8	Tetrachloro-m-xylene	89%		30-150%
2051-24-3	Decachlorobiphenyl	90%		30-150%
2051-24-3	Decachlorobiphenyl	88%		30-150%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Parameter Certifications (MA)
- Chain of Custody
- MCP Form
- Sample Tracking Chronicle

Parameter Certification Exceptions

Job Number: M96226
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

The following parameters included in this report are exceptions to NELAC certification.
The certification status of each is indicated below.

Parameter	CAS#	Method	Mat	Certification Status
Aroclor 1262	37324-23-5	SW846 8082	SO	Certified by SOP MGC204/GC-ECD
Aroclor 1268	11100-14-4	SW846 8082	SO	Certified by SOP MGC204/GC-ECD

4.1
4

HALEY & ALDRICH Haley & Aldrich, Inc. 465 Medford St., Suite 2200, Boston, MA 02129-1400		CHAIN OF CUSTODY RECORD		M96226 Phone (617) 886-7400 Fax (617) 886-7600 Page 2 of	
		H&A FILE NO. <u>06318-502</u> PROJECT NAME <u>FORMER ENERGY INTERNATIONAL PARCEL</u> H&A CONTACT <u>J. KULLMAN</u>		LABORATORY <u>ACCUTEST</u> ADDRESS <u>MAKROBIOCHINA</u> CONTACT <u>R. GILPIN</u>	

No.	Date	Time	Depth	Type	Analysis Requested														Number of Containers	Comments (special instructions, precautions, additional method numbers, etc.)	
					VOA	ADMS	PAT only	MCP Metals	PCBs	PAHs	PAH Suite	Crude oil only	PAH Suite	Crude oil only	TPH (specify)	TCLP (specify)	Heavy Metals	Ammonia			Conductivity
-11	HA109	2-4'	11/30/10	1000	2-4	SOL														1	Laboratory to use applicable DEP CAM methods, unless otherwise directed. ① PCB S
-12	HA109	4-6'		1025	4-6														1		
-13	HA109	6-8'		1035	6-8														1		
-14	HA109	8-10'		1055	8-10														1		
-15	HA109	10-12'		1055	10-12														1		
-16	HA109	12-14'		1120	12-14														1		
-17	HA109	14-16.5'		1120	14-16.5														1		
-18	HA109	16.5-18'		1150	16.5-18														1		
-19	HA108	0-2'		1220	0-2'														1		
-20	HA108	2-4'		1225	2-4'														1		

Sampled and Relinquished by: <u>Matthew Dodson</u> Sign: <u>[Signature]</u> Print: MATTHEW DODSON Firm: H & A Date: 11/30/10 Time: 1540		Received by: <u>Waymond</u> Sign: <u>[Signature]</u> Print: WAYMOND Firm: H & A Date: 11-30-10 Time: 1540		LIQUID <u>(10 TOTAL)</u>		Sampling Comments: <u>* Hold all samples below 8ft</u>	
Relinquished by: Sign: <u>Waymond</u> Print: <u>Waymond</u> Firm: <u>H & A</u> Date: <u>11-30-10</u> Time: <u>1620</u>		Received by: Sign: <u>Waymond</u> Print: <u>Waymond</u> Firm: <u>H & A</u> Date: <u>11-30-10</u> Time: <u>1620</u>		SOLID <u>X</u> <u>A</u> <u>402</u>		Evidence samples were tampered with? YES NO If YES, please explain in section below.	

PRESERVATION KEY			
A Sample chilled	C NaOH	E H ₂ SO ₄	G Methanol
B Sample filtered	D HNO ₃	F HCL	H Water/NaHSO ₄ (circle)

If Presumptive Certainty Data Package is needed, initial all sections: <input checked="" type="checkbox"/> The required minimum field QC samples, as designated in BWSC CAM-VII have been or will be collected, as appropriate, to meet the requirements of Presumptive Certainty. Matrix Spike (MS) samples for MCP Metals and/or Cyanide are included and identified herein. This Chain of Custody Record (specify) <u>includes</u> <u>X</u> does not include samples defined as Drinking Water Samples. If this Chain of Custody Record identifies samples defined as Drinking Water Samples, Trip Blanks and Field Duplicates are included and identified and analysis of TICs are required, as appropriate. Laboratory should (specify if applicable) <u>analyze</u>		Required Reporting Limits and Data Quality Objectives <input checked="" type="checkbox"/> RC-S1 <input type="checkbox"/> S1 <input type="checkbox"/> GW1 <input type="checkbox"/> RC-S2 <input type="checkbox"/> S2 <input type="checkbox"/> GW2 <input type="checkbox"/> RC-GW1 <input type="checkbox"/> S3 <input type="checkbox"/> GW3 <input type="checkbox"/> RC-GW2	
---	--	---	--

Form 3003

WHITE - Laboratory

CANARY - Project Manager

PINK - Haley & Aldrich Laboratory

2.3°C

AUGUST 2008

M96226: Chain of Custody

Page 2 of 5

**HALEY &
ALDRICH**

Haley & Aldrich, Inc.
465 Medford St.,
Suite 2200,
Boston, MA 02129-1400

CHAIN OF CUSTODY RECORD

Phone	(617) 886-7400
Fax	(617) 886-7600

Page 3 of 4

H&A FILE NO. 06318-502

LABORATORY ADJUSTS

DELIVERY DATE

Page 2

PROJECT NAME FORMER ENERGY INTERNATIONAL PARCEL

ADDRESS MARLBOROUGH, MA

TURNAROUND TIME

10 324

H&A CONTACT J. KULLMAN

CONTACT

PROJECT MANAGER

10/1/74

Sample No.						Date	Time	Depth	Type	Analysis Requested																	Comments (special instructions, precautions, additional method numbers, etc.)									
									VOA	AAS PAA only	MCP Metals	Pesticides PCBs	VPH	Full State Change only	Partial State Change only	TTH (specify)	TCLP (specify)	Toxicity Ignitability Corrosivity					Number of Containers													
-21	HA108 - 4-6'				11/30/10	1305	4-6	SOIL				X													Laboratory to use applicable DEF CAM methods, unless otherwise directed. ① PCBs											
-22	HA108 - 6-8'					1300	6-8				X																									
-23	HA108 - 8-10'					1340	8-10				X																									
-24	HA108 - 10-13'					1395	10-13				X																									
-25	HA108 - 13-16'					1350	13-16				X																									
-26	HA107 - 0-2'					1405	0-2				X																									
-27	HA107 - 2-4'					1410	2-4				X																									
-28	HA107 - 4-6'					1440	4-6				X																									
-29	HA107 - 6-8'					1440	6-8				X																									
-30	HA107 - 8-10'					1500	8-10				X																									
Sampled and Relinquished by									Received by									LIQUID									10 TOTAL	Sampling Comments								
Sign [Signature]									Sign [Signature]																			* Hold all samples below 8'								
Print MATTHEW DORSON									Print WAYNE MORAN																			Amber Glass								
Firm H + A									Firm																			Plastic Bottle								
Date 11/30/10 Time 1540									Date 11-30-10 Time 1540																			Preservative								
Relinquished by									Received by																			Volume								
Sign [Signature]									Sign [Signature]																											
Print									Print																			VOA Vial								
Firm									Firm																			Amber Glass								
Date 11-10-10 Time									Date 11-30-10 Time 1630																			Clear Glass								
Relinquished by									Received by																			Preservative								
Sign									Sign																			Volume								
Print									Print																											
Firm									Firm																											
Date									Date																											
PRESERVATION KEY																									Evidence samples were tampered with? YES NO											
A Sample chilled C NaOH E H ₂ SO ₄ G Methanol																									If YES, please explain in section below.											
B Sample filtered D HNO ₃ F HCL H Water/NaHSO ₄ (circle)																																				
Presumptive Certainty Data Package (Laboratory to use applicable DEF CAM methods)																																				
If Presumptive Certainty Data Package is needed, initial all sections:																									Required Reporting Limits and Data Quality Objectives											
<input checked="" type="checkbox"/> The required minimum field QC samples, as designated in BWSC CAM-VII have been or will be collected, to meet the requirements of Presumptive Certainty.																									<input checked="" type="checkbox"/> RC-S1 <input type="checkbox"/> S1 <input type="checkbox"/> GW1											
<input type="checkbox"/> Matrix Spike (MS) samples for MCP Metals and/or Cyanide are included and identified herein.																									<input type="checkbox"/> RC-S2 <input type="checkbox"/> S2 <input type="checkbox"/> GW2											
<input checked="" type="checkbox"/> This Chain of Custody Record (specify) includes <input checked="" type="checkbox"/> does not include samples defined as Drinking Water Samples.																									<input type="checkbox"/> RC-GW1 <input type="checkbox"/> S3 <input type="checkbox"/> GW3											
<input type="checkbox"/> If this Chain of Custody Record identifies samples defined as Drinking Water Samples, Trip Blanks and Field Duplicates are included and identified and analysis of TICs are required, as appropriate. Laboratory should (specify if applicable) _____ analyze																									<input type="checkbox"/> RC-GW2											

Phone	(617) 886-7400
Fax	(617) 886-7600
Page	4 of 4

H&A FILE NO. 010 318-502

PROJECT NAME FORMER ENERGY INTERNATIONAL

H&A CONTACT

LABORATORY

ADDRESS

CONTACT

ACCIDENT

MARLBOROUGH

V GIBBS 15

DELIVERY DATE

TURN AROUND TIME

TURNAROUND TIME
PROJECT MANAGER

Page 4 of 4

130/10

10 day

✓ WORTHY

[illegible]

Sampled and Relinquished by		Received by		LIQUID		Sampling Comments	
Sign <i>Matthew Dobson</i>	Sign <i>Waymond</i>			VOA-Vial		* Had all samples below 8 ft	
Print MATTHEW DOBSON	Print WAYMOND			Amber Glass			
Firm HTA	Firm			Plastic Bottle			
Date 11/30/10 Time 1540	Date 11-30-10 Time 1540			Preservative			
Relinquished by	Received by			Volume			
Sign <i>Waymond</i>	Sign <i>Waymond</i>			SOLID			
Print	Print			VOA Vial			
Firm	Firm			Amber Glass			
Date 11-30-10 Time	Date 11-30-10 Time 1630			Clear Glass			
Relinquished by	Received by			Preservative		Evidence samples were tampered with? YES NO If YES, please explain in section below.	
Sign	Sign			Volume			
Print	Print						
Firm	Firm						
Date	Date						
				PRESERVATION KEY			
		A Sample chilled		C NaOH		E H ₂ SO ₄	
		B Sample filtered		D HNO ₃		F HCL	
						G Methanol	
						H Water/NaHSO ₄ (circle)	

If Presumptive Certainty Data Package is needed, initial all sections:

The required minimum field QC samples, as designated in BWSC CAM-VII have been or will be collected, as appropriate, to meet the requirements of Presumptive Certainty.

Matrix Spike (MS) samples for MCP Metals and/or Cyanide are included and identified herein.

☒ This Chain of Custody Record (specify) _____ includes ☒ does not include samples defined as Drinking Water Samples.

If this Chain of Custody Record identifies samples defined as Drinking Water Samples, Trip Blanks and Field Duplicates are included and identified and analysis of TICs are required, as appropriate. Laboratory should (specify if applicable) analyze

Required Reporting Limits and Data Quality Objectives

<input checked="" type="checkbox"/> RC-S1	<input type="checkbox"/> S1	<input type="checkbox"/> GW1
<input type="checkbox"/> RC-S2	<input type="checkbox"/> S2	<input type="checkbox"/> GW2
<input type="checkbox"/> RC-GW1	<input type="checkbox"/> S3	<input type="checkbox"/> GW3
<input type="checkbox"/> RC-GW2		

Form 3003

WHITE - Laboratory

CANARY - Project Manager

PINK - Haley & Aldrich Laboratory

23°C

AUGUST 2008

Frank D'Agostino

1796226

From: Parkin Kullmann, Jane [jkullmann@haleyaldrich.com]
Sent: Monday, December 13, 2010 2:14 PM
To: Frank D'Agostino
Subject: Energy International PCB soil analyses follow-up

Hi Frank,

I talked with my Project Manager for the Energy International project again, and he thought since the analyses were already conducted, that we should include in the report the results for the samples 8 feet and below for those sample locations specifically (i.e., HA-111, HA-112, and HA-113), as well as the additional samples that we are analyzing for PCBs from 0-2 and 2-4 ft bgs from those same boring locations. For any other boring locations where the results were not yet reported, we would just like to report the results for PCB analyses of soil from 0-2 and 2-4 ft bgs.

Let me know if you have any further questions or need any clarification about the analyses.

Thanks,
Jane

Jane A. Parkin Kullmann
Staff Engineer
HALEY & ALDRICH
465 Medford Street, Suite 2200
Boston, MA 02129-1400
Tel: 617.886.7354
Fax: 617.886.7654
Cell: 847.370.3018
Email: jkullmann@HaleyAldrich.com
www.HaleyAldrich.com

12/13/2010

M96226: Chain of Custody
Page 5 of 5



Massachusetts Department
of Environmental Protection
Bureau of Waste Site Cleanup

WSC-CAM

Exhibit VII A

July 1, 2010

Revision No. 1

Final

Page 13 of 38

Exhibit VII A-2: MassDEP Analytical Protocol Certification Form

MassDEP Analytical Protocol Certification Form

Laboratory Name:	Accutest Laboratories of New England	Project #:	M96226		
Project Location:	Former Energy International Parcel, MA	MADEP RTN	None		
This form provides certifications for the following data set: list Laboratory Sample ID Numbers(s) M96226-1, M96226-2, M96226-10, M96226-11, M96226-19, M96226-20, M96226-26, M96226-27 M96226-4, M96226-13, M96226-22, M96226-29					
Matrices:	Groundwater/Surface Water () Soil/Sediment (X) Drinking Water () Air () Other ()				
CAM Protocol (check all that apply below):					
8260 VOC () CAM IIA	7470/7471 Hg () CAM III B	MassDEP VPH () CAM IV A	8081 Pesticides () CAM V B	7196 Hex Cr () CAM VI B	Mass DEP APH () CAM IX A
8270 SVOC () CAM II B	7010 Metals () CAM III C	MassDEP EPH () CAM IV B	8151 Herbicides () CAM V C	8330 Explosives () CAM VIII A	TO-15 VOC CAM IX B
6010 Metals () CAM III A	6020 Metals () CAM III D	8082 PCB (X) CAM V A	9014 Total Cyanide/PAC CAM VI A	6860 Perchlorate () CAM VIII B	
Affirmative Responses to Questions A Through F are required for "Presumptive Certainty status					
A	Were all samples received in a condition consistent with those described on the Chain-of Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?			<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?			<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?			<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?			<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
E	VPH, EPH, APH, and TO-15 only: a. VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?			<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?			<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Responses to questions G, H, and I below is required for "Presumptive Certainty" status					
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols			<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No ¹
Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data useability and representativeness requirements described in 310 CMR 40.1056(2)(k) and WSC-07-350.					
H	Were all QC performance standards specified in the CAM protocol(s) achieved?			<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No ¹
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?			<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No ¹
¹ All Negative responses must be addressed in an attached Environmental Laboratory case narrative.					
I the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.					
Signature:				Position:	Laboratory Director
Printed Name:	Reza Tand			Date:	12/18/2010

Internal Sample Tracking Chronicle

Haley & Aldrich

Job No: M96226

Former Energy International Parcel, MA
Project No: 06318-502

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M96226-1 HA110_0-2'	Collected: 30-NOV-10 08:00	By: MD	Received: 30-NOV-10	By: JB		
M96226-1	SM21 2540 B MOD.	13-DEC-10	HS			%SOL
M96226-1	SW846 8082	18-DEC-10 09:37	CZ	13-DEC-10	AJ	P8082SOXHLET
M96226-2 HA110_2-4'	Collected: 30-NOV-10 08:00	By: MD	Received: 30-NOV-10	By: JB		
M96226-2	SM21 2540 B MOD.	13-DEC-10	HS			%SOL
M96226-2	SW846 8082	18-DEC-10 10:13	CZ	13-DEC-10	AJ	P8082SOXHLET
M96226-4 HA110_6-8'	Collected: 30-NOV-10 08:35	By: MD	Received: 30-NOV-10	By: JB		
M96226-4	SM21 2540 B MOD.	03-DEC-10	HS			%SOL
M96226-4	SW846 8082	06-DEC-10 04:44	AP	03-DEC-10	BJ	P8082SOXHLET
M96226-10 HA109_0-2'	Collected: 30-NOV-10 10:00	By: MD	Received: 30-NOV-10	By: JB		
M96226-10	SM21 2540 B MOD.	13-DEC-10	HS			%SOL
M96226-10	SW846 8082	17-DEC-10 09:08	CZ	13-DEC-10	AJ	P8082SOXHLET
M96226-11 HA109_2-4'	Collected: 30-NOV-10 10:00	By: MD	Received: 30-NOV-10	By: JB		
M96226-11	SM21 2540 B MOD.	13-DEC-10	HS			%SOL
M96226-11	SW846 8082	17-DEC-10 10:49	CZ	13-DEC-10	AJ	P8082SOXHLET
M96226-13 HA109_6-8'	Collected: 30-NOV-10 10:35	By: MD	Received: 30-NOV-10	By: JB		
M96226-13	SM21 2540 B MOD.	03-DEC-10	HS			%SOL
M96226-13	SW846 8082	06-DEC-10 07:22	AP	03-DEC-10	BJ	P8082SOXHLET
M96226-19 HA108_0-2'	Collected: 30-NOV-10 12:20	By: MD	Received: 30-NOV-10	By: JB		
M96226-19	SM21 2540 B MOD.	13-DEC-10	HS			%SOL

Internal Sample Tracking Chronicle

Haley & Aldrich

Job No: M96226

Former Energy International Parcel, MA
Project No: 06318-502

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M96226-19	SW846 8082	17-DEC-10 11:42	CZ	13-DEC-10	AJ	P8082SOXHLET
M96226-20 Collected: 30-NOV-10 12:25 By: MD Received: 30-NOV-10 By: JB HA108_2-4'						
M96226-20	SM21 2540 B MOD.	13-DEC-10	HS			%SOL
M96226-20	SW846 8082	17-DEC-10 12:32	CZ	13-DEC-10	AJ	P8082SOXHLET
M96226-22 Collected: 30-NOV-10 13:00 By: MD Received: 30-NOV-10 By: JB HA108_6-8'						
M96226-22	SM21 2540 B MOD.	03-DEC-10	HS			%SOL
M96226-22	SW846 8082	06-DEC-10 09:59	AP	03-DEC-10	BJ	P8082SOXHLET
M96226-26 Collected: 30-NOV-10 14:05 By: MD Received: 30-NOV-10 By: JB HA107_0-2'						
M96226-26	SM21 2540 B MOD.	13-DEC-10	HS			%SOL
M96226-26	SW846 8082	17-DEC-10 13:30	CZ	13-DEC-10	AJ	P8082SOXHLET
M96226-27 Collected: 30-NOV-10 14:10 By: MD Received: 30-NOV-10 By: JB HA107_2-4'						
M96226-27	SM21 2540 B MOD.	13-DEC-10	HS			%SOL
M96226-27	SW846 8082	17-DEC-10 14:13	CZ	13-DEC-10	AJ	P8082SOXHLET
M96226-29 Collected: 30-NOV-10 14:40 By: MD Received: 30-NOV-10 By: JB HA107_6-8'						
M96226-29	SM21 2540 B MOD.	03-DEC-10	HS			%SOL
M96226-29	SW846 8082	06-DEC-10 11:34	AP	03-DEC-10	BJ	P8082SOXHLET

GC Semi-volatiles

5

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Page 1 of 1

Job Number: M96226
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23523-MB	BE22756.D	1	12/06/10	AP	12/03/10	OP23523	GBE1365

The QC reported here applies to the following samples:

Method: SW846 8082

M96226-4, M96226-13, M96226-22, M96226-29

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	99	ug/kg	
11104-28-2	Aroclor 1221	ND	99	ug/kg	
11141-16-5	Aroclor 1232	ND	99	ug/kg	
53469-21-9	Aroclor 1242	ND	99	ug/kg	
12672-29-6	Aroclor 1248	ND	99	ug/kg	
11097-69-1	Aroclor 1254	ND	99	ug/kg	
11096-82-5	Aroclor 1260	ND	99	ug/kg	
37324-23-5	Aroclor 1262	ND	99	ug/kg	
11100-14-4	Aroclor 1268	ND	99	ug/kg	

CAS No.	Surrogate Recoveries	Limits
877-09-8	Tetrachloro-m-xylene	109% 30-150%
877-09-8	Tetrachloro-m-xylene	107% 30-150%
2051-24-3	Decachlorobiphenyl	97% 30-150%
2051-24-3	Decachlorobiphenyl	92% 30-150%

Method Blank Summary

Page 1 of 1

Job Number: M96226
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23621-MB	YZ62990.D	1	12/15/10	CZ	12/13/10	OP23621	GYZ2675

The QC reported here applies to the following samples:

Method: SW846 8082

M96226-1, M96226-2, M96226-10, M96226-11, M96226-19, M96226-20, M96226-26, M96226-27

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	98	ug/kg	
11104-28-2	Aroclor 1221	ND	98	ug/kg	
11141-16-5	Aroclor 1232	ND	98	ug/kg	
53469-21-9	Aroclor 1242	ND	98	ug/kg	
12672-29-6	Aroclor 1248	ND	98	ug/kg	
11097-69-1	Aroclor 1254	ND	98	ug/kg	
11096-82-5	Aroclor 1260	ND	98	ug/kg	
37324-23-5	Aroclor 1262	ND	98	ug/kg	
11100-14-4	Aroclor 1268	ND	98	ug/kg	

CAS No.	Surrogate Recoveries	Limits
877-09-8	Tetrachloro-m-xylene	93% 30-150%
877-09-8	Tetrachloro-m-xylene	91% 30-150%
2051-24-3	Decachlorobiphenyl	97% 30-150%
2051-24-3	Decachlorobiphenyl	98% 30-150%

Blank Spike Summary

Page 1 of 1

Job Number: M96226

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23621-BS	YZ62991.D	1	12/15/10	CZ	12/13/10	OP23621	GYZ2675

The QC reported here applies to the following samples:

Method: SW846 8082

M96226-1, M96226-2, M96226-10, M96226-11, M96226-19, M96226-20, M96226-26, M96226-27

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
12674-11-2	Aroclor 1016	251	257	103	40-140
11104-28-2	Aroclor 1221		ND		40-140
11141-16-5	Aroclor 1232		ND		40-140
53469-21-9	Aroclor 1242		ND		40-140
12672-29-6	Aroclor 1248		ND		40-140
11097-69-1	Aroclor 1254		ND		40-140
11096-82-5	Aroclor 1260	251	268	107	40-140
37324-23-5	Aroclor 1262		ND		40-140
11100-14-4	Aroclor 1268		ND		40-140

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	94%	30-150%
877-09-8	Tetrachloro-m-xylene	95%	30-150%
2051-24-3	Decachlorobiphenyl	98%	30-150%
2051-24-3	Decachlorobiphenyl	99%	30-150%

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 1

Job Number: M96226

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23523-BS	BE22757.D	1	12/06/10	AP	12/03/10	OP23523	GBE1365
OP23523-BSD	BE22758.D	1	12/06/10	AP	12/03/10	OP23523	GBE1365

The QC reported here applies to the following samples:

Method: SW846 8082

M96226-4, M96226-13, M96226-22, M96226-29

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	265	301	114	312	118	4	40-140/30
11104-28-2	Aroclor 1221		ND		ND		nc	40-140/30
11141-16-5	Aroclor 1232		ND		ND		nc	40-140/30
53469-21-9	Aroclor 1242		ND		ND		nc	40-140/30
12672-29-6	Aroclor 1248		ND		ND		nc	40-140/30
11097-69-1	Aroclor 1254		ND		ND		nc	40-140/30
11096-82-5	Aroclor 1260	265	285	108	289	109	1	40-140/30
37324-23-5	Aroclor 1262		ND		ND		nc	40-140/30
11100-14-4	Aroclor 1268		ND		ND		nc	40-140/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
877-09-8	Tetrachloro-m-xylene	105%	108%	30-150%
877-09-8	Tetrachloro-m-xylene	101%	107%	30-150%
2051-24-3	Decachlorobiphenyl	100%	102%	30-150%
2051-24-3	Decachlorobiphenyl	96%	96%	30-150%

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: M96226
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23523-MS	BE22759.D	1	12/06/10	AP	12/03/10	OP23523	GBE1365
OP23523-MSD	BE22760.D	1	12/06/10	AP	12/03/10	OP23523	GBE1365
M96226-4	BE22761.D	1	12/06/10	AP	12/03/10	OP23523	GBE1365

The QC reported here applies to the following samples:

Method: SW846 8082

M96226-4, M96226-13, M96226-22, M96226-29

CAS No.	Compound	M96226-4 ug/kg	Spike Q	ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND		310	334	108	328	107	2	40-140/50
11104-28-2	Aroclor 1221	ND			ND		ND		nc	40-140/50
11141-16-5	Aroclor 1232	ND			ND		ND		nc	40-140/50
53469-21-9	Aroclor 1242	ND			ND		ND		nc	40-140/50
12672-29-6	Aroclor 1248	ND			ND		ND		nc	40-140/50
11097-69-1	Aroclor 1254	ND			ND		ND		nc	40-140/50
11096-82-5	Aroclor 1260	74.2		310	583	164* a	351	91	50	40-140/50
37324-23-5	Aroclor 1262	ND			ND		ND		nc	40-140/50
11100-14-4	Aroclor 1268	ND			ND		ND		nc	40-140/50

CAS No.	Surrogate Recoveries	MS	MSD	M96226-4	Limits
877-09-8	Tetrachloro-m-xylene	158% * a	94%	98%	30-150%
877-09-8	Tetrachloro-m-xylene	99%	105%	96%	30-150%
2051-24-3	Decachlorobiphenyl	163% * a	94%	101%	30-150%
2051-24-3	Decachlorobiphenyl	172% * a	94%	117%	30-150%

(a) Outside control limits due to possible matrix interference.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: M96226
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23621-MS	YZ62992.D	1	12/15/10	CZ	12/13/10	OP23621	GYZ2675
OP23621-MSD	YZ62993.D	1	12/15/10	CZ	12/13/10	OP23621	GYZ2675
M96200-1	YZ62994.D	1	12/15/10	CZ	12/13/10	OP23621	GYZ2675

The QC reported here applies to the following samples:

Method: SW846 8082

M96226-1, M96226-2, M96226-10, M96226-11, M96226-19, M96226-20, M96226-26, M96226-27

CAS No.	Compound	M96200-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND		287	280	98	227	78	21	40-140/50
11104-28-2	Aroclor 1221	ND			ND		ND		nc	40-140/50
11141-16-5	Aroclor 1232	ND			ND		ND		nc	40-140/50
53469-21-9	Aroclor 1242	ND			ND		ND		nc	40-140/50
12672-29-6	Aroclor 1248	ND			ND		ND		nc	40-140/50
11097-69-1	Aroclor 1254	ND			ND		ND		nc	40-140/50
11096-82-5	Aroclor 1260	ND		287	294	102	235	81	22	40-140/50
37324-23-5	Aroclor 1262	ND			ND		ND		nc	40-140/50
11100-14-4	Aroclor 1268	ND			ND		ND		nc	40-140/50

CAS No.	Surrogate Recoveries	MS	MSD	M96200-1	Limits
877-09-8	Tetrachloro-m-xylene	87%	83%	89%	30-150%
877-09-8	Tetrachloro-m-xylene	60%	84%	77%	30-150%
2051-24-3	Decachlorobiphenyl	442% * a	505% * a	367% * a	30-150%
2051-24-3	Decachlorobiphenyl	122%	139%	126%	30-150%

(a) Outside control limits due to possible matrix interference.

Semivolatile Surrogate Recovery Summary

Page 1 of 1

Job Number: M96226
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Method: SW846 8082	Matrix: SO
---------------------------	-------------------

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a	S1 ^b	S2 ^a	S2 ^b
M96226-1	YZ63145.D	112.0	123.0	150.0	85.0
M96226-2	YZ63147.D	101.0	69.0	489.0* ^c	149.0
M96226-4	BE22761.D	98.0	96.0	101.0	117.0
M96226-10	YZ63083.D	74.0	85.0	438.0* ^c	30.0
M96226-11	YZ63086.D	91.0	55.0	517.0* ^c	113.0
M96226-13	BE22768.D	72.0	77.0	71.0	75.0
M96226-19	YZ63088.D	97.0	94.0	607.0* ^c	140.0
M96226-20	YZ63090.D	92.0	121.0	231.0* ^c	130.0
M96226-22	BE22775.D	106.0	106.0	104.0	106.0
M96226-26	YZ63092.D	110.0	77.0	488.0* ^c	145.0
M96226-27	YZ63094.D	101.0	128.0	388.0* ^c	147.0
M96226-29	BE22779.D	93.0	89.0	90.0	88.0
OP23523-BS	BE22757.D	105.0	101.0	100.0	96.0
OP23523-BSD	BE22758.D	108.0	107.0	102.0	96.0
OP23523-MB	BE22756.D	109.0	107.0	97.0	92.0
OP23523-MS	BE22759.D	158.0* ^c	99.0	163.0* ^c	172.0* ^c
OP23523-MSD	BE22760.D	94.0	105.0	94.0	94.0
OP23621-BS	YZ62991.D	94.0	95.0	98.0	99.0
OP23621-MB	YZ62990.D	93.0	91.0	97.0	98.0
OP23621-MS	YZ62992.D	87.0	60.0	442.0* ^c	122.0
OP23621-MSD	YZ62993.D	83.0	84.0	505.0* ^c	139.0

Surrogate Compounds

Recovery Limits

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

30-150%
30-150%

- (a) Recovery from GC signal #1
- (b) Recovery from GC signal #2
- (c) Outside control limits due to possible matrix interference.



12/18/10

Technical Report for

Haley & Aldrich

Former Energy International Parcel, MA

06318-502

Accutest Job Number: M96256

Sampling Date: 12/01/10

Report to:

Haley & Aldrich

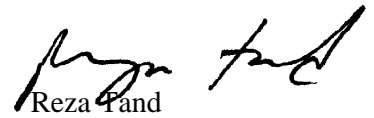
jkullmann@haleyaldrich.com

ATTN: Jane Kullmann

Total number of pages in report: **39**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.


Reza Fand
Lab Director

Client Service contact: Kristen Blanchard 508-481-6200

Certifications: MA (M-MA136, SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) ME (MA00136) FL (E87579) NY (11791) NJ (MA926) PA (6801121) ND (R-188) CO MN (11546AA) NC (653) IL (002337) ISO 17025:2005 (L2235)

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Table of Contents

-1-

Section 1: Sample Summary	3
Section 2: Case Narrative/Conformance Summary	5
Section 3: Sample Results	7
3.1: M96256-1: HA106_0-2'	8
3.2: M96256-2: HA106_2-4'	9
3.3: M96256-4: HA106_6-8'	10
3.4: M96256-8: HA105_0-2'	11
3.5: M96256-9: HA105_2-4'	12
3.6: M96256-11: HA103_0-2'	13
3.7: M96256-12: HA103_2-4'	14
3.8: M96256-14: HA103_6-8'	15
3.9: M96256-19: HA104_0-2'	16
3.10: M96256-20: HA104_2-4'	17
3.11: M96256-22: HA104_6-8'	18
3.12: M96256-26: HA105_6-8'	19
Section 4: Misc. Forms	20
4.1: Certification Exceptions	21
4.2: Chain of Custody	22
4.3: MCP Form	26
4.4: Sample Tracking Chronicle	27
Section 5: GC Semi-volatiles - QC Data Summaries	29
5.1: Method Blank Summary	30
5.2: Blank Spike Summary	33
5.3: Blank Spike/Blank Spike Duplicate Summary	35
5.4: Matrix Spike/Matrix Spike Duplicate Summary	36
5.5: Surrogate Recovery Summaries	39

Sample Summary

Haley & Aldrich

Job No: M96256

Former Energy International Parcel, MA
Project No: 06318-502

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
M96256-1	12/01/10	08:15 MD	12/01/10	SO	Soil	HA106_0-2'
M96256-2	12/01/10	08:10 MD	12/01/10	SO	Soil	HA106_2-4'
M96256-4	12/01/10	08:45 MD	12/01/10	SO	Soil	HA106_6-8'
M96256-5	12/01/10	09:25 MD	12/01/10	SO	Soil	HA106_8-10'
M96256-6	12/01/10	09:20 MD	12/01/10	SO	Soil	HA106_10-12'
M96256-7	12/01/10	09:00 MD	12/01/10	SO	Soil	HA106_12-14'
M96256-8	12/01/10	14:05 MD	12/01/10	SO	Soil	HA105_0-2'
M96256-9	12/01/10	14:00 MD	12/01/10	SO	Soil	HA105_2-4'
M96256-11	12/01/10	10:25 MD	12/01/10	SO	Soil	HA103_0-2'
M96256-12	12/01/10	10:20 MD	12/01/10	SO	Soil	HA103_2-4'
M96256-14	12/01/10	10:40 MD	12/01/10	SO	Soil	HA103_6-8'
M96256-15	12/01/10	11:05 MD	12/01/10	SO	Soil	HA103_8-10'
M96256-16	12/01/10	11:00 MD	12/01/10	SO	Soil	HA103_10-12'

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary

(continued)

Haley & Aldrich

Job No: M96256

Former Energy International Parcel, MA

Project No: 06318-502

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
M96256-17	12/01/10	11:15 MD	12/01/10	SO	Soil	HA103_12-13.5'
M96256-18	12/01/10	11:20 MD	12/01/10	SO	Soil	HA103_13.5-16'
M96256-19	12/01/10	12:20 MD	12/01/10	SO	Soil	HA104_0-2'
M96256-20	12/01/10	12:15 MD	12/01/10	SO	Soil	HA104_2-4'
M96256-22	12/01/10	12:50 MD	12/01/10	SO	Soil	HA104_6-8'
M96256-23	12/01/10	13:05 MD	12/01/10	SO	Soil	HA104_8-10'
M96256-24	12/01/10	13:00 MD	12/01/10	SO	Soil	HA104_10-12'
M96256-25	12/01/10	13:25 MD	12/01/10	SO	Soil	HA104_13.2-15'
M96256-26	12/01/10	14:10 MD	12/01/10	SO	Soil	HA105_6-8'
M96256-27	12/01/10	14:35 MD	12/01/10	SO	Soil	HA105_8-10'
M96256-28	12/01/10	14:40 MD	12/01/10	SO	Soil	HA105_10-12.2'
M96256-29	12/01/10	14:45 MD	12/01/10	SO	Soil	HA105_12.2-14'

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Haley & Aldrich

Job No M96256

Site: Former Energy International Parcel, MA

Report Date 12/18/2010 6:29:42 PM

12 Sample(s) were collected on 12/01/2010 and were received at Accutest on 12/01/2010 properly preserved, at 2.1 Deg. C and intact. These Samples received an Accutest job number of M96256. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Extractables by GC By Method SW846 8082

Matrix SO	Batch ID: OP23542
------------------	--------------------------

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M96297-1MS, M96297-1MSD were used as the QC samples indicated.

Matrix SO	Batch ID: OP23548
------------------	--------------------------

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) M96256-26MS, M96256-26MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Matrix SO	Batch ID: OP23622
------------------	--------------------------

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M96288-1MS, M96288-1MSD were used as the QC samples indicated.
- M96256-19 for Tetrachloro-m-xylene: Outside control limits due to dilution.
- M96256-19 for Decachlorobiphenyl: Outside control limits due to possible matrix interference.
- RPD of OP23622-MSD for Aroclor 1254: Outside control limits due to possible matrix interference.
- M96256-12 for Decachlorobiphenyl: Estimated value due to the presence of other Aroclor pattern.
- M96256-9 for Aroclor 1248: Estimated value due to the presence of other Aroclor pattern.
- M96256-8, M96256-11, M96256-19, M96256-20 for Decachlorobiphenyl: Outside control limits due to possible matrix interference.
- M96256-8, M96256-11, OP23622-MS /MSD for Tetrachloro-m-xylene: Outside control limits due to possible matrix interference.
- M96256-9, M96256-12, M96256-20 for Aroclor 1260: Estimated value due to the presence of other Aroclor pattern.

Wet Chemistry By Method SM21 2540 B MOD.**Matrix** SO**Batch ID:** GN33609

- Sample(s) M96200-13DUP were used as the QC samples for Solids, Percent.

Matrix SO**Batch ID:** GN33610

- Sample(s) M96256-22DUP were used as the QC samples for Solids, Percent.

Matrix SO**Batch ID:** GN33702

- Sample(s) M96200-2DUP were used as the QC samples for Solids, Percent.

Matrix SO**Batch ID:** GN33703

- Sample(s) M96541-5DUP were used as the QC samples for Solids, Percent.

The Accutest Laboratories of New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety. The Accutest Laboratories of NE, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report(M96256).

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	HA106_0-2'	Date Sampled:	12/01/10
Lab Sample ID:	M96256-1	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	94.9
Method:	SW846 8082 SW846 3540C		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ63057.D	1	12/16/10	CZ	12/13/10	OP23622	GYZ2677
Run #2							

	Initial Weight	Final Volume
Run #1	16.0 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	99	ug/kg	
11104-28-2	Aroclor 1221	ND	99	ug/kg	
11141-16-5	Aroclor 1232	ND	99	ug/kg	
53469-21-9	Aroclor 1242	ND	99	ug/kg	
12672-29-6	Aroclor 1248	ND	99	ug/kg	
11097-69-1	Aroclor 1254	ND	99	ug/kg	
11096-82-5	Aroclor 1260	ND	99	ug/kg	
37324-23-5	Aroclor 1262	ND	99	ug/kg	
11100-14-4	Aroclor 1268	ND	99	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	40%		30-150%
877-09-8	Tetrachloro-m-xylene	31%		30-150%
2051-24-3	Decachlorobiphenyl	148%		30-150%
2051-24-3	Decachlorobiphenyl	114%		30-150%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA106_2-4'	Date Sampled:	12/01/10
Lab Sample ID:	M96256-2	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	81.6
Method:	SW846 8082 SW846 3540C		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ63134.D	1	12/18/10	CZ	12/13/10	OP23622	GYZ6278
Run #2							

	Initial Weight	Final Volume
Run #1	15.1 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	120	ug/kg	
11104-28-2	Aroclor 1221	ND	120	ug/kg	
11141-16-5	Aroclor 1232	ND	120	ug/kg	
53469-21-9	Aroclor 1242	ND	120	ug/kg	
12672-29-6	Aroclor 1248	ND	120	ug/kg	
11097-69-1	Aroclor 1254	ND	120	ug/kg	
11096-82-5	Aroclor 1260	147	120	ug/kg	
37324-23-5	Aroclor 1262	ND	120	ug/kg	
11100-14-4	Aroclor 1268	ND	120	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	109%		30-150%
877-09-8	Tetrachloro-m-xylene	91%		30-150%
2051-24-3	Decachlorobiphenyl	136%		30-150%
2051-24-3	Decachlorobiphenyl	86%		30-150%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA106_6-8'	Date Sampled:	12/01/10
Lab Sample ID:	M96256-4	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	79.3
Method:	SW846 8082 SW846 3540C		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ62764.D	1	12/10/10	CZ	12/06/10	OP23542	GYZ2666
Run #2							

	Initial Weight	Final Volume
Run #1	15.1 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	130	ug/kg	
11104-28-2	Aroclor 1221	ND	130	ug/kg	
11141-16-5	Aroclor 1232	ND	130	ug/kg	
53469-21-9	Aroclor 1242	ND	130	ug/kg	
12672-29-6	Aroclor 1248	ND	130	ug/kg	
11097-69-1	Aroclor 1254	ND	130	ug/kg	
11096-82-5	Aroclor 1260	ND	130	ug/kg	
37324-23-5	Aroclor 1262	ND	130	ug/kg	
11100-14-4	Aroclor 1268	ND	130	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	113%		30-150%
877-09-8	Tetrachloro-m-xylene	81%		30-150%
2051-24-3	Decachlorobiphenyl	115%		30-150%
2051-24-3	Decachlorobiphenyl	98%		30-150%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA105_0-2'	Date Sampled:	12/01/10
Lab Sample ID:	M96256-8	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	95.7
Method:	SW846 8082 SW846 3540C		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ63061.D	1	12/16/10	CZ	12/13/10	OP23622	GYZ2677
Run #2							

Run #	Initial Weight	Final Volume
Run #1	15.5 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	100	ug/kg	
11104-28-2	Aroclor 1221	ND	100	ug/kg	
11141-16-5	Aroclor 1232	ND	100	ug/kg	
53469-21-9	Aroclor 1242	ND	100	ug/kg	
12672-29-6	Aroclor 1248	ND	100	ug/kg	
11097-69-1	Aroclor 1254	ND	100	ug/kg	
11096-82-5	Aroclor 1260	ND	100	ug/kg	
37324-23-5	Aroclor 1262	ND	100	ug/kg	
11100-14-4	Aroclor 1268	ND	100	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	67%		30-150%
877-09-8	Tetrachloro-m-xylene	7% ^a		30-150%
2051-24-3	Decachlorobiphenyl	161% ^a		30-150%
2051-24-3	Decachlorobiphenyl	116%		30-150%

(a) Outside control limits due to possible matrix interference.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA105_2-4'	Date Sampled:	12/01/10
Lab Sample ID:	M96256-9	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	87.5
Method:	SW846 8082 SW846 3540C		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ63136.D	1	12/18/10	CZ	12/13/10	OP23622	GYZ6278
Run #2							

	Initial Weight	Final Volume
Run #1	15.3 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	110	ug/kg	
11104-28-2	Aroclor 1221	ND	110	ug/kg	
11141-16-5	Aroclor 1232	ND	110	ug/kg	
53469-21-9	Aroclor 1242	ND	110	ug/kg	
12672-29-6	Aroclor 1248 ^a	132	110	ug/kg	
11097-69-1	Aroclor 1254	379	110	ug/kg	
11096-82-5	Aroclor 1260 ^a	308	110	ug/kg	
37324-23-5	Aroclor 1262	ND	110	ug/kg	
11100-14-4	Aroclor 1268	ND	110	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	100%		30-150%
877-09-8	Tetrachloro-m-xylene	83%		30-150%
2051-24-3	Decachlorobiphenyl	136%		30-150%
2051-24-3	Decachlorobiphenyl	96%		30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA103_0-2'	Date Sampled:	12/01/10
Lab Sample ID:	M96256-11	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	92.8
Method:	SW846 8082 SW846 3540C		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ63066.D	1	12/16/10	CZ	12/13/10	OP23622	GYZ2677
Run #2							

Run #	Initial Weight	Final Volume
Run #1	15.4 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	100	ug/kg	
11104-28-2	Aroclor 1221	ND	100	ug/kg	
11141-16-5	Aroclor 1232	ND	100	ug/kg	
53469-21-9	Aroclor 1242	ND	100	ug/kg	
12672-29-6	Aroclor 1248	ND	100	ug/kg	
11097-69-1	Aroclor 1254	ND	100	ug/kg	
11096-82-5	Aroclor 1260	ND	100	ug/kg	
37324-23-5	Aroclor 1262	ND	100	ug/kg	
11100-14-4	Aroclor 1268	ND	100	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	71%		30-150%
877-09-8	Tetrachloro-m-xylene	7% ^a		30-150%
2051-24-3	Decachlorobiphenyl	23% ^a		30-150%
2051-24-3	Decachlorobiphenyl	52%		30-150%

(a) Outside control limits due to possible matrix interference.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA103_2-4'	Date Sampled:	12/01/10
Lab Sample ID:	M96256-12	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	85.7
Method:	SW846 8082 SW846 3540C		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ63139.D	1	12/18/10	CZ	12/13/10	OP23622	GYZ6278
Run #2							

Run #	Initial Weight	Final Volume
Run #1	15.7 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	110	ug/kg	
11104-28-2	Aroclor 1221	ND	110	ug/kg	
11141-16-5	Aroclor 1232	ND	110	ug/kg	
53469-21-9	Aroclor 1242	ND	110	ug/kg	
12672-29-6	Aroclor 1248	ND	110	ug/kg	
11097-69-1	Aroclor 1254	728	110	ug/kg	
11096-82-5	Aroclor 1260 ^a	552	110	ug/kg	
37324-23-5	Aroclor 1262	ND	110	ug/kg	
11100-14-4	Aroclor 1268	ND	110	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	107%		30-150%
877-09-8	Tetrachloro-m-xylene	99%		30-150%
2051-24-3	Decachlorobiphenyl	402% ^a		30-150%
2051-24-3	Decachlorobiphenyl	139%		30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA103_6-8'	Date Sampled:	12/01/10
Lab Sample ID:	M96256-14	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	82.1
Method:	SW846 8082 SW846 3540C		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ62768.D	1	12/11/10	CZ	12/06/10	OP23542	GYZ2666
Run #2							

Run #	Initial Weight	Final Volume
Run #1	15.1 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	120	ug/kg	
11104-28-2	Aroclor 1221	ND	120	ug/kg	
11141-16-5	Aroclor 1232	ND	120	ug/kg	
53469-21-9	Aroclor 1242	ND	120	ug/kg	
12672-29-6	Aroclor 1248	ND	120	ug/kg	
11097-69-1	Aroclor 1254	ND	120	ug/kg	
11096-82-5	Aroclor 1260	ND	120	ug/kg	
37324-23-5	Aroclor 1262	ND	120	ug/kg	
11100-14-4	Aroclor 1268	ND	120	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	58%		30-150%
877-09-8	Tetrachloro-m-xylene	59%		30-150%
2051-24-3	Decachlorobiphenyl	117%		30-150%
2051-24-3	Decachlorobiphenyl	60%		30-150%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA104_0-2'	Date Sampled:	12/01/10
Lab Sample ID:	M96256-19	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	93.8
Method:	SW846 8082 SW846 3540C		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ63070.D	1	12/16/10	CZ	12/13/10	OP23622	GYZ2677
Run #2	YZ63141.D	5	12/18/10	CZ	12/13/10	OP23622	GYZ6278

	Initial Weight	Final Volume
Run #1	15.2 g	10.0 ml
Run #2	15.2 g	10.0 ml

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	110	ug/kg	
11104-28-2	Aroclor 1221	ND	110	ug/kg	
11141-16-5	Aroclor 1232	ND	110	ug/kg	
53469-21-9	Aroclor 1242	ND	110	ug/kg	
12672-29-6	Aroclor 1248	ND	110	ug/kg	
11097-69-1	Aroclor 1254	1840 ^a	530	ug/kg	
11096-82-5	Aroclor 1260	ND	110	ug/kg	
37324-23-5	Aroclor 1262	ND	110	ug/kg	
11100-14-4	Aroclor 1268	ND	110	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	132%	175% ^b	30-150%
877-09-8	Tetrachloro-m-xylene	133%	153% ^b	30-150%
2051-24-3	Decachlorobiphenyl	389% ^c	290% ^c	30-150%
2051-24-3	Decachlorobiphenyl	204% ^c	173% ^c	30-150%

(a) Result is from Run# 2

(b) Outside control limits due to dilution.

(c) Outside control limits due to possible matrix interference.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA104_2-4'	Date Sampled:	12/01/10
Lab Sample ID:	M96256-20	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	89.2
Method:	SW846 8082 SW846 3540C		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ63143.D	1	12/18/10	CZ	12/13/10	OP23622	GYZ6278
Run #2							

Run #	Initial Weight	Final Volume
Run #1	15.0 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	110	ug/kg	
11104-28-2	Aroclor 1221	ND	110	ug/kg	
11141-16-5	Aroclor 1232	ND	110	ug/kg	
53469-21-9	Aroclor 1242	ND	110	ug/kg	
12672-29-6	Aroclor 1248	ND	110	ug/kg	
11097-69-1	Aroclor 1254	338	110	ug/kg	
11096-82-5	Aroclor 1260 ^a	315	110	ug/kg	
37324-23-5	Aroclor 1262	ND	110	ug/kg	
11100-14-4	Aroclor 1268	ND	110	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	117%		30-150%
877-09-8	Tetrachloro-m-xylene	117%		30-150%
2051-24-3	Decachlorobiphenyl	158% ^b		30-150%
2051-24-3	Decachlorobiphenyl	91%		30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

(b) Outside control limits due to possible matrix interference.

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA104_6-8'	Date Sampled:	12/01/10
Lab Sample ID:	M96256-22	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	71.8
Method:	SW846 8082 SW846 3540C		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ62773.D	1	12/11/10	CZ	12/06/10	OP23542	GYZ2666
Run #2							

Run #	Initial Weight	Final Volume
Run #1	15.6 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	130	ug/kg	
11104-28-2	Aroclor 1221	ND	130	ug/kg	
11141-16-5	Aroclor 1232	ND	130	ug/kg	
53469-21-9	Aroclor 1242	ND	130	ug/kg	
12672-29-6	Aroclor 1248	ND	130	ug/kg	
11097-69-1	Aroclor 1254	ND	130	ug/kg	
11096-82-5	Aroclor 1260	ND	130	ug/kg	
37324-23-5	Aroclor 1262	ND	130	ug/kg	
11100-14-4	Aroclor 1268	ND	130	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	109%		30-150%
877-09-8	Tetrachloro-m-xylene	110%		30-150%
2051-24-3	Decachlorobiphenyl	119%		30-150%
2051-24-3	Decachlorobiphenyl	111%		30-150%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA105_6-8'	Date Sampled:	12/01/10
Lab Sample ID:	M96256-26	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	77.1
Method:	SW846 8082 SW846 3540C		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ62722.D	1	12/10/10	CZ	12/07/10	OP23548	GYZ2665
Run #2							

Run #	Initial Weight	Final Volume
Run #1	15.4 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	130	ug/kg	
11104-28-2	Aroclor 1221	ND	130	ug/kg	
11141-16-5	Aroclor 1232	ND	130	ug/kg	
53469-21-9	Aroclor 1242	ND	130	ug/kg	
12672-29-6	Aroclor 1248	ND	130	ug/kg	
11097-69-1	Aroclor 1254	ND	130	ug/kg	
11096-82-5	Aroclor 1260	ND	130	ug/kg	
37324-23-5	Aroclor 1262	ND	130	ug/kg	
11100-14-4	Aroclor 1268	ND	130	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	91%		30-150%
877-09-8	Tetrachloro-m-xylene	96%		30-150%
2051-24-3	Decachlorobiphenyl	94%		30-150%
2051-24-3	Decachlorobiphenyl	97%		30-150%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Parameter Certifications (MA)
- Chain of Custody
- MCP Form
- Sample Tracking Chronicle

Parameter Certification Exceptions

Job Number: M96256
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

The following parameters included in this report are exceptions to NELAC certification.
The certification status of each is indicated below.

Parameter	CAS#	Method	Mat	Certification Status
Aroclor 1262	37324-23-5	SW846 8082	SO	Certified by SOP MGC204/GC-ECD
Aroclor 1268	11100-14-4	SW846 8082	SO	Certified by SOP MGC204/GC-ECD

4.1
4

M96256

HALEY & ALDRICH		Haley & Aldrich, Inc. 465 Medford St., Suite 2200, Boston, MA 02129-1400		CHAIN OF CUSTODY RECORD		Phone (617) 886-7400 Fax (617) 886-7600 Page 2 of 3	
H&A FILE NO. <u>010318-S02</u>		LABORATORY <u>ACCLINEST</u>		DELIVERY DATE <u>12/11/10</u>			
PROJECT NAME <u>FORMER ENERGY INTERNATIONAL PARCEL</u>		ADDRESS <u>MARLBOROUGH, MA</u>		TURNAROUND TIME <u>10 Day</u>			
H&A CONTACT <u>J. KULLMAN</u>		CONTACT <u>K. ZIBBON</u>		PROJECT MANAGER <u>C. WRIGHT</u>			

Sample No.	Date	Time	Depth	Type	Analysis Requested														Number of Containers	Comments (special instructions, precautions, additional method numbers, etc.)
					VOA	AMS	AMS only	AMS Metals	AMS PCBs	AMS PAHs	AMS PAHs only	AMS PAHs Metals	AMS PAHs PCBs	AMS PAHs PAHs	AMS PAHs PAHs only	AMS PAHs PAHs Metals	AMS PAHs PAHs PCBs	AMS PAHs PAHs PAHs		
-11 HA 103-0-2'	12/1/10	1025	0-2	SOIL																Laboratory to use applicable DEP CAM methods, unless otherwise directed. ① PCBs
-12 HA 103-2-4'		1020	2-4																	
-13 HA 103-4-6'		1040	4-6																	
-14 HA 103-6-8'		1040	6-8																	
-15 HA 103-8-10'		1105	8-10																	
-16 HA 103-10-12'		1100	10-12																	
-17 HA 103-12-135'		1115	12-135																	
-18 HA 103-135-16'		1120	135-16																	
-19 HA 104-0-2'		1220	0-2																	
-20 HA 104-2-4'		1215	2-4																	

Sampled and Relinquished by Sign <u>Matthew Dopsow</u> Print MATTHEW DOPSON Firm H + A Date 12/1/10 Time 1510		Received by Sign <u>Will Doherty</u> Print Firm ALNYS Date 12/1/10 Time 1510		LIQUID <u>10 TOTAL</u> VOA Vial Amber Glass Plastic Bottle Preservative Volume		Sampling Comments <u>* PROX all samples below JST</u>	
Relinquished by Sign <u>Will Doherty</u> Print Firm Date 12/1/10 Time 1650		Received by Sign <u>Will Doherty</u> Print Firm Date 12/1/10 Time 1650		SOLID VOA Vial Amber Glass Clear Glass Preservative Volume		Evidence samples were tampered with? YES NO If YES, please explain in section below.	

PRESERVATION KEY A Sample chilled C NaOH E H ₂ SO ₄ G Methanol B Sample filtered D HNO ₃ F HCL H Water/NaHSO ₄ (circle)			
---	--	--	--

Presumptive Certainty Data Package (Laboratory to use applicable DEP CAM methods)		Required Reporting Limits and Data Quality Objectives	
If Presumptive Certainty Data Package is needed, initial all sections: <input checked="" type="checkbox"/> The required minimum field QC samples, as designated in BWSC CAM-VII have been or will be collected, as appropriate, to meet the requirements of Presumptive Certainty. Matrix Spike (MS) samples for MCP Metals and/or Cyanide are included and identified herein. <input checked="" type="checkbox"/> This Chain of Custody Record (specify) includes <input checked="" type="checkbox"/> does not include samples defined as Drinking Water Samples. If this Chain of Custody Record identifies samples defined as Drinking Water Samples, Trip Blanks and Field Duplicates are included and identified and analysis of TICs are required, as appropriate. Laboratory should (specify if applicable) analyze		<input checked="" type="checkbox"/> RC-S1 <input type="checkbox"/> S1 <input type="checkbox"/> GW1 <input type="checkbox"/> RC-S2 <input type="checkbox"/> S2 <input type="checkbox"/> GW2 <input type="checkbox"/> RC-GW1 <input type="checkbox"/> S3 <input type="checkbox"/> GW3 <input type="checkbox"/> RC-GW2	

Form 3003

WHITE - Laboratory

CANARY - Project Manager

PINK - Haley & Aldrich Laboratory

AUGUST 2008

M96256: Chain of Custody

Page 2 of 4

Phone	(617) 886-7400
Fax	(617) 886-7600
Page	3 of 3

H&A FILE NO.	06318-502	LABORATORY	ACCUTEST	DELIVERY DATE	2/1/10
PROJECT NAME	FORMER ENERGY INTERNATIONAL PAPER	ADDRESS	MARLBOROUGH, MA	TURNAROUND TIME	10 days
H&A CONTACT	J VOLLMAN	CONTACT	K. GIBBONS	PROJECT MANAGER	C. ...

Sample No.	Date	Time	Depth (ft)	Type	Analysis Requested														Number of Containers	Comments (special instructions, precautions, additional method numbers, etc.)
					VOA	ADMS Part only	MCP Metals	☉ Pesticides PCBs	VPH	Full Suite	Compass only	ERT	Full Suite	Compass only	TPH (specify)	TCLP (specify)	Asbestos	Leachability		
21 HA104-4-6'	12/1/10	12:45	4-6	SOIL				X									1	Laboratory to use applicable DEP CAM methods, unless otherwise directed. ① PCBs		
22 HA104-6-8'		12:50	6-8					X									1			
23 HA104-8-10'		13:05	8-10					X									1			
24 HA104-10-12'		13:20	10-12					X									1			
HA104-12-14'		13:35	12-14					X									1			
25 HA104-12-15'		13:25	12-15					X									1			
26 HA105-6-8'		14:10	6-8					X									1			
27 HA105-8-10'		14:35	8-10					X									1			
28 HA105-10-122'		14:40	10-122'					X									1			
29 HA105-122-14'		14:45	122-14					X									1			
Sampled and Relinquished by		Received by		LIQUID														Sampling Comments		
Sign <i>[Signature]</i>		Sign <i>[Signature]</i>		VOA-Vial															* hold all samples below 8ft	
Print MATT HEW DODSON		Print		Amber Glass																
Firm H + A		Firm		Plastic Bottle																
Date 12/1/10 Time		Date 12/1/10 Time 15:00		Preservative														Evidence samples were tampered with? YES NO If YES, please explain in section below.		
Relinquished by		Received by		Volume																
Sign <i>[Signature]</i>		Sign <i>[Signature]</i>		SOLID																
Print		Print		VOA Vial																
Firm		Firm		Amber Glass																
Date 12/1/10 Time 16:50		Date 12/1/10 Time 16:50		Clear Glass																
Relinquished by		Received by		Preservative																
Sign		Sign		Volume																
Print		Print		PRESERVATION KEY																
Firm		Firm		A Sample chilled C NaOH E H ₂ SO ₄ G Methanol																
Date		Date		B Sample filtered D HNO ₃ F HCL H Water/NaHSO ₄ (circle)																
Presumptive Certainty Data Package (Laboratory to use applicable DEP CAM methods)																				
If Presumptive Certainty Data Package is needed, initial all sections:																				
<input checked="" type="checkbox"/> The required minimum field QC samples, as designated in BWSC CAM-VII have been or will be collected, to meet the requirements of Presumptive Certainty. <input type="checkbox"/> Matrix Spike (MS) samples for MCP Metals and/or Cyanide are included and identified herein. <input checked="" type="checkbox"/> This Chain of Custody Record (specify) <u>X</u> does not include samples defined as Drinking Water Samples. <input type="checkbox"/> If this Chain of Custody Record identifies samples defined as Drinking Water Samples, Trip Blanks and Field Duplicates are included and identified and analysis of TICs are required, as appropriate. Laboratory should (specify if applicable) _____ analyz																				
Required Reporting Limits and Data Quality Objectives																				
<input checked="" type="checkbox"/> RC-S1 <input type="checkbox"/> S1 <input type="checkbox"/> GW1 <input type="checkbox"/> RC-S2 <input type="checkbox"/> S2 <input type="checkbox"/> GW2 <input type="checkbox"/> RC-GW1 <input type="checkbox"/> S3 <input type="checkbox"/> GW3 <input type="checkbox"/> RC-GW2																				

Frank D'Agostino

1796256

From: Parkin Kullmann, Jane [jkullmann@haleyaldrich.com]
Sent: Monday, December 13, 2010 2:14 PM
To: Frank D'Agostino
Subject: Energy International PCB soil analyses follow-up

Hi Frank,

I talked with my Project Manager for the Energy International project again, and he thought since the analyses were already conducted, that we should include in the report the results for the samples 8 feet and below for those sample locations specifically (i.e., HA-111, HA-112, and HA-113), as well as the additional samples that we are analyzing for PCBs from 0-2 and 2-4 ft bgs from those same boring locations. For any other boring locations where the results were not yet reported, we would just like to report the results for PCB analyses of soil from 0-2 and 2-4 ft bgs.

Let me know if you have any further questions or need any clarification about the analyses.

Thanks,
Jane

Jane A. Parkin Kullmann
Staff Engineer
HALEY & ALDRICH
465 Medford Street, Suite 2200
Boston, MA 02129-1400
Tel: 617.886.7354
Fax: 617.886.7654
Cell: 847.370.3018
Email: jkullmann@HaleyAldrich.com
www.HaleyAldrich.com

12/13/2010

M96256: Chain of Custody
Page 4 of 4



Massachusetts Department
of Environmental Protection
Bureau of Waste Site Cleanup

WSC-CAM	Exhibit VII A
July 1, 2010	Revision No. 1
Final	Page 13 of 38

Exhibit VII A-2: MassDEP Analytical Protocol Certification Form

MassDEP Analytical Protocol Certification Form

Laboratory Name:	Accutest Laboratories of New England	Project #:	M96256
Project Location:	Former Energy International Parcel, MA	MADEP RTN	None
This form provides certifications for the following data set: list Laboratory Sample ID Numbers(s) M96256-4, M96256-14, M96256-22, M96256-26 M96256-1, M96256-2, M96256-8, M96256-9, M96256-11, M96256-12, M96256-19, M96256-20			
Matrices: Groundwater/Surface Water () Soil/Sediment (X) Drinking Water () Air () Other ()			
CAM Protocol (check all that apply below):			
8260 VOC () CAM IIA	7470/7471 Hg () CAM III B	MassDEP VPH () CAM IV A	8081 Pesticides () CAM V B
8270 SVOC () CAM II B	7010 Metals () CAM III C	MassDEP EPH () CAM IV B	8151 Herbicides () CAM V C
6010 Metals () CAM III A	6020 Metals () CAM III D	8082 PCB (X) CAM V A	9014 Total () Cyanide/PAC CAM VI A
7196 Hex Cr () CAM VI B			
Mass DEP APH () CAM IX A			
8330 Explosives () CAM VIII A			
TO-15 VOC CAM IX B			
6860 Perchlorate () CAM VIII B			
Affirmative Responses to Questions A Through F are required for "Presumptive Certainty status			
A	Were all samples received in a condition consistent with those described on the Chain-of Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
E	VPH, EPH, APH, and TO-15 only: a. VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No b. APH and TO-15 Methods only: Was the complete analyte list reported for each method? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
Responses to questions G, H, and I below is required for "Presumptive Certainty" status			
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹		
Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data useability and representativeness requirements described in 310 CMR 40.1056(2)(k) and WSC-07-350.			
H	Were all QC performance standards specified in the CAM protocol(s) achieved? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No ¹		
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹		
¹ All Negative responses must be addressed in an attached Environmental Laboratory case narrative.			
I the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.			
Signature:	Reza Tand		
Position:	Laboratory Director		
Printed Name:	Reza Tand		
Date:	12/18/2010		

Internal Sample Tracking Chronicle

Haley & Aldrich

Job No: M96256

Former Energy International Parcel, MA
Project No: 06318-502

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M96256-1 Collected: 01-DEC-10 08:15 By: MD Received: 01-DEC-10 By: JB HA106_0-2'						
M96256-1	SM21 2540 B MOD.	13-DEC-10	HS			%SOL
M96256-1	SW846 8082	16-DEC-10 13:12	CZ	13-DEC-10	AJ	P8082SOXHLET
M96256-2 Collected: 01-DEC-10 08:10 By: MD Received: 01-DEC-10 By: JB HA106_2-4'						
M96256-2	SM21 2540 B MOD.	13-DEC-10	HS			%SOL
M96256-2	SW846 8082	18-DEC-10 06:08	CZ	13-DEC-10	AJ	P8082SOXHLET
M96256-4 Collected: 01-DEC-10 08:45 By: MD Received: 01-DEC-10 By: JB HA106_6-8'						
M96256-4	SM21 2540 B MOD.	03-DEC-10	HS			%SOL
M96256-4	SW846 8082	10-DEC-10 22:54	CZ	06-DEC-10	CA	P8082SOXHLET
M96256-8 Collected: 01-DEC-10 14:05 By: MD Received: 01-DEC-10 By: JB HA105_0-2'						
M96256-8	SM21 2540 B MOD.	13-DEC-10	HS			%SOL
M96256-8	SW846 8082	16-DEC-10 14:53	CZ	13-DEC-10	AJ	P8082SOXHLET
M96256-9 Collected: 01-DEC-10 14:00 By: MD Received: 01-DEC-10 By: JB HA105_2-4'						
M96256-9	SM21 2540 B MOD.	13-DEC-10	HS			%SOL
M96256-9	SW846 8082	18-DEC-10 06:44	CZ	13-DEC-10	AJ	P8082SOXHLET
M96256-11 Collected: 01-DEC-10 10:25 By: MD Received: 01-DEC-10 By: JB HA103_0-2'						
M96256-11	SM21 2540 B MOD.	13-DEC-10	HS			%SOL
M96256-11	SW846 8082	16-DEC-10 17:03	CZ	13-DEC-10	AJ	P8082SOXHLET
M96256-12 Collected: 01-DEC-10 10:20 By: MD Received: 01-DEC-10 By: JB HA103_2-4'						
M96256-12	SM21 2540 B MOD.	13-DEC-10	HS			%SOL

Internal Sample Tracking Chronicle

Haley & Aldrich

Job No: M96256

Former Energy International Parcel, MA
Project No: 06318-502

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M96256-12	SW846 8082	18-DEC-10 07:41	CZ	13-DEC-10	AJ	P8082SOXHLET
M96256-14 Collected: 01-DEC-10 10:40 By: MD Received: 01-DEC-10 By: JB HA103_6-8'						
M96256-14	SM21 2540 B MOD.	03-DEC-10	HS			%SOL
M96256-14	SW846 8082	11-DEC-10 00:13	CZ	06-DEC-10	CA	P8082SOXHLET
M96256-19 Collected: 01-DEC-10 12:20 By: MD Received: 01-DEC-10 By: JB HA104_0-2'						
M96256-19	SM21 2540 B MOD.	13-DEC-10	HS			%SOL
M96256-19	SW846 8082	16-DEC-10 18:44	CZ	13-DEC-10	AJ	P8082SOXHLET
M96256-19	SW846 8082	18-DEC-10 08:18	CZ	13-DEC-10	AJ	P8082SOXHLET
M96256-20 Collected: 01-DEC-10 12:15 By: MD Received: 01-DEC-10 By: JB HA104_2-4'						
M96256-20	SM21 2540 B MOD.	13-DEC-10	HS			%SOL
M96256-20	SW846 8082	18-DEC-10 09:01	CZ	13-DEC-10	AJ	P8082SOXHLET
M96256-22 Collected: 01-DEC-10 12:50 By: MD Received: 01-DEC-10 By: JB HA104_6-8'						
M96256-22	SM21 2540 B MOD.	03-DEC-10	HS			%SOL
M96256-22	SW846 8082	11-DEC-10 01:47	CZ	06-DEC-10	CA	P8082SOXHLET
M96256-26 Collected: 01-DEC-10 14:10 By: MD Received: 01-DEC-10 By: JB HA105_6-8'						
M96256-26	SM21 2540 B MOD.	03-DEC-10	HS			%SOL
M96256-26	SW846 8082	10-DEC-10 08:58	CZ	07-DEC-10	FC	P8082SOXHLET

GC Semi-volatiles

5

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Page 1 of 1

Job Number: M96256
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23542-MB	YZ62753.D	1	12/10/10	CZ	12/06/10	OP23542	GYZ2666

The QC reported here applies to the following samples:

Method: SW846 8082

M96256-4, M96256-14, M96256-22

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	98	ug/kg	
11104-28-2	Aroclor 1221	ND	98	ug/kg	
11141-16-5	Aroclor 1232	ND	98	ug/kg	
53469-21-9	Aroclor 1242	ND	98	ug/kg	
12672-29-6	Aroclor 1248	ND	98	ug/kg	
11097-69-1	Aroclor 1254	ND	98	ug/kg	
11096-82-5	Aroclor 1260	ND	98	ug/kg	
37324-23-5	Aroclor 1262	ND	98	ug/kg	
11100-14-4	Aroclor 1268	ND	98	ug/kg	

CAS No.	Surrogate Recoveries	Limits
877-09-8	Tetrachloro-m-xylene	99% 30-150%
877-09-8	Tetrachloro-m-xylene	95% 30-150%
2051-24-3	Decachlorobiphenyl	104% 30-150%
2051-24-3	Decachlorobiphenyl	107% 30-150%

Method Blank Summary

Page 1 of 1

Job Number: M96256

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23548-MB	YZ62718.D	1	12/09/10	CZ	12/07/10	OP23548	GYZ2665

The QC reported here applies to the following samples:

Method: SW846 8082

M96256-26

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	98	ug/kg	
11104-28-2	Aroclor 1221	ND	98	ug/kg	
11141-16-5	Aroclor 1232	ND	98	ug/kg	
53469-21-9	Aroclor 1242	ND	98	ug/kg	
12672-29-6	Aroclor 1248	ND	98	ug/kg	
11097-69-1	Aroclor 1254	ND	98	ug/kg	
11096-82-5	Aroclor 1260	ND	98	ug/kg	
37324-23-5	Aroclor 1262	ND	98	ug/kg	
11100-14-4	Aroclor 1268	ND	98	ug/kg	

CAS No.	Surrogate Recoveries	Limits
877-09-8	Tetrachloro-m-xylene	90% 30-150%
877-09-8	Tetrachloro-m-xylene	91% 30-150%
2051-24-3	Decachlorobiphenyl	87% 30-150%
2051-24-3	Decachlorobiphenyl	97% 30-150%

Method Blank Summary

Page 1 of 1

Job Number: M96256
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23622-MB	YZ63039.D	1	12/16/10	CZ	12/13/10	OP23622	GYZ2676

The QC reported here applies to the following samples:

Method: SW846 8082

M96256-1, M96256-2, M96256-8, M96256-9, M96256-11, M96256-12, M96256-19, M96256-20

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	97	ug/kg	
11104-28-2	Aroclor 1221	ND	97	ug/kg	
11141-16-5	Aroclor 1232	ND	97	ug/kg	
53469-21-9	Aroclor 1242	ND	97	ug/kg	
12672-29-6	Aroclor 1248	ND	97	ug/kg	
11097-69-1	Aroclor 1254	ND	97	ug/kg	
11096-82-5	Aroclor 1260	ND	97	ug/kg	
37324-23-5	Aroclor 1262	ND	97	ug/kg	
11100-14-4	Aroclor 1268	ND	97	ug/kg	

CAS No.	Surrogate Recoveries	Limits
877-09-8	Tetrachloro-m-xylene	93% 30-150%
877-09-8	Tetrachloro-m-xylene	101% 30-150%
2051-24-3	Decachlorobiphenyl	108% 30-150%
2051-24-3	Decachlorobiphenyl	116% 30-150%

Blank Spike Summary

Page 1 of 1

Job Number: M96256

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23548-BS	YZ62719.D	1	12/09/10	CZ	12/07/10	OP23548	GYZ2665

The QC reported here applies to the following samples:

Method: SW846 8082

M96256-26

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
12674-11-2	Aroclor 1016	263	324	123	40-140
11104-28-2	Aroclor 1221		ND		40-140
11141-16-5	Aroclor 1232		ND		40-140
53469-21-9	Aroclor 1242		ND		40-140
12672-29-6	Aroclor 1248		ND		40-140
11097-69-1	Aroclor 1254		ND		40-140
11096-82-5	Aroclor 1260	263	277	105	40-140
37324-23-5	Aroclor 1262		ND		40-140
11100-14-4	Aroclor 1268		ND		40-140

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	90%	30-150%
877-09-8	Tetrachloro-m-xylene	91%	30-150%
2051-24-3	Decachlorobiphenyl	97%	30-150%
2051-24-3	Decachlorobiphenyl	108%	30-150%

Blank Spike Summary

Page 1 of 1

Job Number: M96256

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23622-BS	YZ63040.D	1	12/16/10	CZ	12/13/10	OP23622	GYZ2676

The QC reported here applies to the following samples:

Method: SW846 8082

M96256-1, M96256-2, M96256-8, M96256-9, M96256-11, M96256-12, M96256-19, M96256-20

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
12674-11-2	Aroclor 1016	261	253	97	40-140
11104-28-2	Aroclor 1221		ND		40-140
11141-16-5	Aroclor 1232		ND		40-140
53469-21-9	Aroclor 1242		ND		40-140
12672-29-6	Aroclor 1248		ND		40-140
11097-69-1	Aroclor 1254		ND		40-140
11096-82-5	Aroclor 1260	261	281	108	40-140
37324-23-5	Aroclor 1262		ND		40-140
11100-14-4	Aroclor 1268		ND		40-140

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	89%	30-150%
877-09-8	Tetrachloro-m-xylene	89%	30-150%
2051-24-3	Decachlorobiphenyl	101%	30-150%
2051-24-3	Decachlorobiphenyl	110%	30-150%

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 1

Job Number: M96256

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23542-BS	YZ62754.D	1	12/10/10	CZ	12/06/10	OP23542	GYZ2666
OP23542-BSD	YZ62755.D	1	12/10/10	CZ	12/06/10	OP23542	GYZ2666

The QC reported here applies to the following samples:

Method: SW846 8082

M96256-4, M96256-14, M96256-22

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	261	309	118	313	122	1	40-140/30
11104-28-2	Aroclor 1221		ND		ND		nc	40-140/30
11141-16-5	Aroclor 1232		ND		ND		nc	40-140/30
53469-21-9	Aroclor 1242		ND		ND		nc	40-140/30
12672-29-6	Aroclor 1248		ND		ND		nc	40-140/30
11097-69-1	Aroclor 1254		ND		ND		nc	40-140/30
11096-82-5	Aroclor 1260	261	305	117	322	125	5	40-140/30
37324-23-5	Aroclor 1262		ND		ND		nc	40-140/30
11100-14-4	Aroclor 1268		ND		ND		nc	40-140/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
877-09-8	Tetrachloro-m-xylene	112%	120%	30-150%
877-09-8	Tetrachloro-m-xylene	109%	120%	30-150%
2051-24-3	Decachlorobiphenyl	113%	123%	30-150%
2051-24-3	Decachlorobiphenyl	116%	126%	30-150%

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: M96256
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23542-MS	YZ62756.D	1	12/10/10	CZ	12/06/10	OP23542	GYZ2666
OP23542-MSD	YZ62757.D	1	12/10/10	CZ	12/06/10	OP23542	GYZ2666
M96297-1	YZ62758.D	1	12/10/10	CZ	12/06/10	OP23542	GYZ2666
M96297-1	YZ62807.D	5	12/11/10	CZ	12/06/10	OP23542	GYZ2667

The QC reported here applies to the following samples:

Method: SW846 8082

M96256-4, M96256-14, M96256-22

CAS No.	Compound	M96297-1 ug/kg	Spike Q	ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND	282		360	127	363	130	1	40-140/50
11104-28-2	Aroclor 1221	ND			ND		ND		nc	40-140/50
11141-16-5	Aroclor 1232	ND			ND		ND		nc	40-140/50
53469-21-9	Aroclor 1242	ND			ND		ND		nc	40-140/50
12672-29-6	Aroclor 1248	1060 ^a			1080		1140		5	40-140/50
11097-69-1	Aroclor 1254	1850 ^a			1630		1740		7	40-140/50
11096-82-5	Aroclor 1260	172	282		481	109	496	116	3	40-140/50
37324-23-5	Aroclor 1262	ND			ND		ND		nc	40-140/50
11100-14-4	Aroclor 1268	ND			ND		ND		nc	40-140/50

CAS No.	Surrogate Recoveries	MS	MSD	M96297-1	M96297-1	Limits
877-09-8	Tetrachloro-m-xylene	108%	111%	138%	134%	30-150%
877-09-8	Tetrachloro-m-xylene	106%	106%	122%	123%	30-150%
2051-24-3	Decachlorobiphenyl	118%	121%	146%	152% * ^b	30-150%
2051-24-3	Decachlorobiphenyl	113%	113%	134%	152% * ^b	30-150%

(a) Result is from Run #2.

(b) Outside control limits due to possible matrix interference.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: M96256

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23548-MS	YZ62720.D	1	12/09/10	CZ	12/07/10	OP23548	GYZ2665
OP23548-MSD	YZ62721.D	1	12/10/10	CZ	12/07/10	OP23548	GYZ2665
M96256-26	YZ62722.D	1	12/10/10	CZ	12/07/10	OP23548	GYZ2665

The QC reported here applies to the following samples:

Method: SW846 8082

M96256-26

CAS No.	Compound	M96256-26 ug/kg	Spike Q	ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND		346	430	124	359	108	18	40-140/50
11104-28-2	Aroclor 1221	ND			ND		ND		nc	40-140/50
11141-16-5	Aroclor 1232	ND			ND		ND		nc	40-140/50
53469-21-9	Aroclor 1242	ND			ND		ND		nc	40-140/50
12672-29-6	Aroclor 1248	ND			ND		ND		nc	40-140/50
11097-69-1	Aroclor 1254	20.5			143		110		26	40-140/50
11096-82-5	Aroclor 1260	ND		346	463	134	382	114	19	40-140/50
37324-23-5	Aroclor 1262	ND			ND		ND		nc	40-140/50
11100-14-4	Aroclor 1268	ND			ND		ND		nc	40-140/50

CAS No.	Surrogate Recoveries	MS	MSD	M96256-26	Limits
877-09-8	Tetrachloro-m-xylene	119%	101%	91%	30-150%
877-09-8	Tetrachloro-m-xylene	123%	102%	96%	30-150%
2051-24-3	Decachlorobiphenyl	122%	105%	94%	30-150%
2051-24-3	Decachlorobiphenyl	122%	107%	97%	30-150%

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: M96256
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23622-MS	YZ63044.D	1	12/16/10	CZ	12/13/10	OP23622	GYZ2677
OP23622-MSD	YZ63046.D	1	12/16/10	CZ	12/13/10	OP23622	GYZ2677
M96288-1	YZ63048.D	1	12/16/10	CZ	12/13/10	OP23622	GYZ2677

The QC reported here applies to the following samples:

Method: SW846 8082

M96256-1, M96256-2, M96256-8, M96256-9, M96256-11, M96256-12, M96256-19, M96256-20

CAS No.	Compound	M96288-1 ug/kg	Spike Q	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND	299	292	98	366	123	22	40-140/50
11104-28-2	Aroclor 1221	ND		ND		ND		nc	40-140/50
11141-16-5	Aroclor 1232	ND		ND		ND		nc	40-140/50
53469-21-9	Aroclor 1242	ND		ND		ND		nc	40-140/50
12672-29-6	Aroclor 1248	ND		ND		ND		nc	40-140/50
11097-69-1	Aroclor 1254	81.1		820		167		132* a	40-140/50
11096-82-5	Aroclor 1260	34.0	299	288	85	380	116	28	40-140/50
37324-23-5	Aroclor 1262	ND		ND		ND		nc	40-140/50
11100-14-4	Aroclor 1268	ND		ND		ND		nc	40-140/50

CAS No.	Surrogate Recoveries	MS	MSD	M96288-1	Limits
877-09-8	Tetrachloro-m-xylene	62%	48%	72%	30-150%
877-09-8	Tetrachloro-m-xylene	1405% * a	13% * a	41%	30-150%
2051-24-3	Decachlorobiphenyl	35%	122%	129%	30-150%
2051-24-3	Decachlorobiphenyl	93%	107%	123%	30-150%

(a) Outside control limits due to possible matrix interference.

Semivolatile Surrogate Recovery Summary

Page 1 of 1

Job Number: M96256
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Method: SW846 8082 **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a	S1 ^b	S2 ^a	S2 ^b
M96256-1	YZ63057.D	40.0	31.0	148.0	114.0
M96256-2	YZ63134.D	109.0	91.0	136.0	86.0
M96256-4	YZ62764.D	113.0	81.0	115.0	98.0
M96256-8	YZ63061.D	67.0	7.0* ^c	161.0* ^c	116.0
M96256-9	YZ63136.D	100.0	83.0	136.0	96.0
M96256-11	YZ63066.D	71.0	7.0* ^c	23.0* ^c	52.0
M96256-12	YZ63139.D	107.0	99.0	402.0* ^d	139.0
M96256-14	YZ62768.D	58.0	59.0	117.0	60.0
M96256-19	YZ63141.D	175.0* ^e	153.0* ^e	290.0* ^c	173.0* ^c
M96256-19	YZ63070.D	132.0	133.0	389.0* ^c	204.0* ^c
M96256-20	YZ63143.D	117.0	117.0	158.0* ^c	91.0
M96256-22	YZ62773.D	109.0	110.0	119.0	111.0
M96256-26	YZ62722.D	91.0	96.0	94.0	97.0
OP23542-BS	YZ62754.D	112.0	109.0	113.0	116.0
OP23542-BSD	YZ62755.D	120.0	120.0	123.0	126.0
OP23542-MB	YZ62753.D	99.0	95.0	104.0	107.0
OP23542-MS	YZ62756.D	108.0	106.0	118.0	113.0
OP23542-MSD	YZ62757.D	111.0	106.0	121.0	113.0
OP23548-BS	YZ62719.D	90.0	91.0	97.0	108.0
OP23548-MB	YZ62718.D	90.0	91.0	87.0	97.0
OP23548-MS	YZ62720.D	119.0	123.0	122.0	122.0
OP23548-MSD	YZ62721.D	101.0	102.0	105.0	107.0
OP23622-BS	YZ63040.D	89.0	89.0	101.0	110.0
OP23622-MB	YZ63039.D	93.0	101.0	108.0	116.0
OP23622-MS	YZ63044.D	62.0	1405.0* ^c	35.0	93.0
OP23622-MSD	YZ63046.D	48.0	13.0* ^c	122.0	107.0

Surrogate Compounds Recovery Limits

S1 = Tetrachloro-m-xylene 30-150%
S2 = Decachlorobiphenyl 30-150%

- (a) Recovery from GC signal #1
- (b) Recovery from GC signal #2
- (c) Outside control limits due to possible matrix interference.
- (d) Estimated value due to the presence of other Arochlor pattern.
- (e) Outside control limits due to dilution.



12/22/10

Technical Report for

Haley & Aldrich

Former Energy International Parcel, MA

06318-502

Accutest Job Number: M96257

Sampling Date: 12/01/10

Report to:

Haley & Aldrich

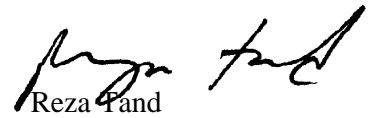
jkullmann@haleyaldrich.com

ATTN: Jane Kullmann

Total number of pages in report: **221**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.


Reza Fand
Lab Director

Client Service contact: Kristen Blanchard 508-481-6200

Certifications: MA (M-MA136, SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) ME (MA00136) FL (E87579) NY (11791) NJ (MA926) PA (6801121) ND (R-188) CO MN (11546AA) NC (653) IL (002337) ISO 17025:2005 (L2235)

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Table of Contents

-1-

Section 1: Sample Summary	4
Section 2: Case Narrative/Conformance Summary	6
Section 3: Sample Results	11
3.1: M96257-1: HA106_0-4'	12
3.2: M96257-1A: HA106_0-4'	21
3.3: M96257-2: HA106_8-12.5'	22
3.4: M96257-2A: HA106_8-12.5'	31
3.5: M96257-3: HA105_0-4'	32
3.6: M96257-3A: HA105_0-4'	41
3.7: M96257-4: HA105_4-8'	42
3.8: M96257-4A: HA105_4-8'	51
3.9: M96257-5: HA104_0-4'	52
3.10: M96257-5A: HA104_0-4'	61
3.11: M96257-6: HA104_8-13.2'	62
3.12: M96257-6A: HA104_8-13.2'	71
3.13: M96257-7: HA103_0-4'	72
3.14: M96257-7A: HA103_0-4'	81
3.15: M96257-8: HA103_4-8'	82
3.16: M96257-8A: HA103_4-8'	91
3.17: M96257-9: HA103_8-12'	92
3.18: M96257-9A: HA103_8-12'	101
Section 4: Misc. Forms	102
4.1: Certification Exceptions	103
4.2: Chain of Custody	104
4.3: MCP Form	105
4.4: EPH Form	106
4.5: VPH Form	115
4.6: Sample Tracking Chronicle	124
Section 5: GC/MS Volatiles - QC Data Summaries	129
5.1: Method Blank Summary	130
5.2: Blank Spike/Blank Spike Duplicate Summary	136
5.3: Matrix Spike/Matrix Spike Duplicate Summary	142
5.4: Internal Standard Area Summaries	148
5.5: Surrogate Recovery Summaries	153
Section 6: GC/MS Semi-volatiles - QC Data Summaries	154
6.1: Method Blank Summary	155
6.2: Blank Spike/Blank Spike Duplicate Summary	157
6.3: Matrix Spike Summary	160
6.4: Internal Standard Area Summaries	163
6.5: Surrogate Recovery Summaries	164
Section 7: GC Volatiles - QC Data Summaries	165
7.1: Method Blank Summary	166

Table of Contents

-2-

7.2: Blank Spike/Blank Spike Duplicate Summary	167
7.3: Matrix Spike/Matrix Spike Duplicate Summary	168
7.4: Surrogate Recovery Summaries	169
Section 8: GC Semi-volatiles - QC Data Summaries	170
8.1: Method Blank Summary	171
8.2: Blank Spike/Blank Spike Duplicate Summary	172
8.3: Matrix Spike/Matrix Spike Duplicate Summary	173
8.4: Surrogate Recovery Summaries	174
Section 9: Metals Analysis - QC Data Summaries	175
9.1: Prep QC MP16330: Sb,As,Ba,Be,Cd,Cr,Pb,Ni,Se,Ag,Tl,V,Zn	176
9.2: Prep QC MP16331: Hg	190
9.3: Prep QC MP16338: Sb,As,Ba,Be,Cd,Cr,Pb,Ni,Se,Ag,Tl,V,Zn	194
9.4: Prep QC MP16339: Pb	206
9.5: Prep QC MP16345: Hg	214
Section 10: General Chemistry - QC Data Summaries	218
10.1: Method Blank and Spike Results Summary	219
10.2: Duplicate Results Summary	220
10.3: Matrix Spike Results Summary	221

Sample Summary

Haley & Aldrich

Job No: M96257

Former Energy International Parcel, MA
Project No: 06318-502

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
M96257-1	12/01/10	08:15 MD	12/01/10	SO	Soil	HA106_0-4'
M96257-1A	12/01/10	08:15 MD	12/01/10	SO	Soil	HA106_0-4'
M96257-2	12/01/10	09:30 MD	12/01/10	SO	Soil	HA106_8-12.5'
M96257-2A	12/01/10	09:30 MD	12/01/10	SO	Soil	HA106_8-12.5'
M96257-3	12/01/10	14:00 MD	12/01/10	SO	Soil	HA105_0-4'
M96257-3A	12/01/10	14:00 MD	12/01/10	SO	Soil	HA105_0-4'
M96257-4	12/01/10	14:25 MD	12/01/10	SO	Soil	HA105_4-8'
M96257-4A	12/01/10	14:25 MD	12/01/10	SO	Soil	HA105_4-8'
M96257-5	12/01/10	12:30 MD	12/01/10	SO	Soil	HA104_0-4'
M96257-5A	12/01/10	12:30 MD	12/01/10	SO	Soil	HA104_0-4'
M96257-6	12/01/10	13:05 MD	12/01/10	SO	Soil	HA104_8-13.2'
M96257-6A	12/01/10	13:05 MD	12/01/10	SO	Soil	HA104_8-13.2'
M96257-6D	12/01/10	13:05 MD	12/01/10	SO	Soil Dup/MSD	HA104_8-13.2'

Soil samples reported on a dry weight basis unless otherwise indicated on result page.



Sample Summary
(continued)

Haley & Aldrich

Job No: M96257

Former Energy International Parcel, MA
Project No: 06318-502

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
M96257-6S	12/01/10	13:05 MD	12/01/10	SO	Soil Matrix Spike	HA104_8-13.2'
M96257-7	12/01/10	10:30 MD	12/01/10	SO	Soil	HA103_0-4'
M96257-7A	12/01/10	10:30 MD	12/01/10	SO	Soil	HA103_0-4'
M96257-8	12/01/10	10:50 MD	12/01/10	SO	Soil	HA103_4-8'
M96257-8A	12/01/10	10:50 MD	12/01/10	SO	Soil	HA103_4-8'
M96257-9	12/01/10	11:10 MD	12/01/10	SO	Soil	HA103_8-12'
M96257-9A	12/01/10	11:10 MD	12/01/10	SO	Soil	HA103_8-12'

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Haley & Aldrich

Job No M96257

Site: Former Energy International Parcel, MA

Report Date 12/22/2010 5:10:24 PM

9 Sample(s) were collected on 12/01/2010 and were received at Accutest on 12/01/2010 properly preserved, at 2.1 Deg. C and intact. These Samples received an Accutest job number of M96257. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix SO

Batch ID: MSR663

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M96199-5MS, M96199-5MSD were used as the QC samples indicated.
- Blank Spike Recovery(s) for Hexachlorobutadiene, Isopropylbenzene are outside control limits. Blank Spike meets program technical requirements.
- Matrix Spike Recovery(s) for Vinyl chloride are outside control limits. Outside control limits due to possible matrix interference. Refer to Blank Spike.
- Matrix Spike Duplicate Recovery(s) for 2-Hexanone, Acetone, Carbon tetrachloride, Hexachlorobutadiene, Isopropylbenzene are outside control limits. Outside control limits due to possible matrix interference. Refer to Blank Spike.
- The response factor (RF) for the 2-Butanone low point in the initial calibration MSR638-ICC638 is 0.028, less than the required RF of 0.1 as noted in Table 4 of SW846 8260C. 2-Butanone is a potential difficult compound.
- M96257-2 for Dibromofluoromethane: Outside control limits due to possible matrix interference. Confirmed by reanalysis.
- BSD Recovery(s) for Carbon tetrachloride, Dibromochloromethane, Tetrachloroethene, Hexachlorobutadiene, Isopropylbenzene are outside control limits. Blank Spike meets program technical requirements.
- Initial calibration verification MSR638-ICV638 for acetone, isopropylbenzene exceed 30% Difference.
- Continuing calibration check standard MSR663-CC638 for chloromethane, trichlorofluoromethane, Tetrahydrofuran, carbon tetrachloride, dibromochloromethane, 1,1,1,2-tetrachloroethane, hexachlorobutadiene exceed 20% Difference. This check standard met MCP criteria.
- M96257-2 has internal standards outside control limits. Outside control limits due to possible matrix interference. Confirmed by reanalysis.

Matrix SO

Batch ID: MSR666

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M96257-6MS, M96257-6MSD were used as the QC samples indicated.
- Blank Spike Recovery(s) for Isopropylbenzene, Tetrachloroethene are outside control limits. Blank Spike meets program technical requirements.
- Matrix Spike Recovery(s) for 2-Hexanone, Dibromochloromethane, Hexachlorobutadiene, Isopropylbenzene, Naphthalene, Styrene, Tetrachloroethene are outside control limits. Outside control limits due to possible matrix interference. Refer to Blank Spike.
- Matrix Spike Duplicate Recovery(s) for 2-Hexanone, Dibromochloromethane, Hexachlorobutadiene, Isopropylbenzene are outside control limits. Outside control limits due to possible matrix interference. Refer to Blank Spike.
- M96257-2: Confirmation run for surrogate recoveries.
- M96257-2 has internal standards outside control limits. Outside control limits due to possible matrix interference. Confirmed by reanalysis.

Extractables by GCMS By Method SW846 8270C

Matrix SO

Batch ID: OP23538

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) M96289-4MS were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Initial calibration verification standard MSS822-ICV822, file S19885 for Aniline, Nitrobenzene-d5, 4-Chloroaniline, 2-Fluorobiphenyl, Terphenyl-d14, 3,3'-Dichlorobenzidine exceeds 30% Difference. Initial calibration verification standard MSS822-ICV822, file S19884 for 2-Fluorophenol, Phenol-d5, 2,4,6-Tribromophenol exceeds 30% Difference
- Matrix Spike Recovery(s) for Phenanthrene, Pyrene are outside control limits. Outside control limits due to high level in sample relative to spike amount.
- OP23538-BS for Acetophenone: Outside control limits. Associated samples are non-detect for this compound.
- MS for 2, 4-Dinitrophenol is outside control limits. Refer to Blank spike.
- OP23538-MS for Benzoic acid, Hexachlorocyclopentadiene, Pentachlorophenol : Outside control limits due to possible matrix interference. Refer to Blank Spike.

Volatiles by GC By Method MADEP VPH REV 1.1

Matrix SO

Batch ID: GBH929

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- M96257-1, M96257-3, M96257-5, M96257-9: Soil to methanol ratio greater than 1.25 to 1.
- Only range requested.

Extractables by GC By Method MADEP EPH REV 1.1

Matrix SO

Batch ID: OP23590

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) M96289-4MS, M96289-4MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- RPD of Matrix Spike Duplicate Recovery(s) for C11-C22 Aromatics (Unadj.) are outside control limits. Outside control limits due to possible matrix interference.
- MSD for C11-C22 Aromatics (Unadj.) are outside control limits for sample OP23590-MSD. Outside control limits due to high level in sample relative to spike amount.
- M96257-2 for C11-C22 Aromatics (Unadj.);, C19-C36 Aliphatics, C9-C18 Aliphatics, C11-C22 Aromatics: Elevated RL due to dilution required for matrix interference.
- M96257-7 for 1-Chlorooctadecane: Outside control limits due to possible matrix interference. Confirmed by reanalysis.
- M96257-2 for o-Terphenyl: Outside control limits due to matrix interference. Confirmed by reanalysis.
- M96257-8 for 1-Chlorooctadecane: Outside control limits due to possible matrix interference. Confirmed by refractionation.
- OP23590-BS for C11-C22 Aromatics (Unadj.): Aromatic breakthrough (naphthalene and/or 2-methylnaphthalene) exceeded 5% method limit. Results confirmed by refractionation.
- Only range requested.

Metals By Method SW846 6010C

Matrix LEACHATE

Batch ID: MP16339

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M96225-8ADUP, M96225-8AMS, M96225-8ASDL were used as the QC samples for metals.

Matrix SO

Batch ID: MP16330

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M96225-8DUP, M96225-8MS, M96225-8PS, M96225-8SDL, M96225-8DUP were used as the QC samples for metals.
- Matrix Spike Recovery(s) for Antimony, Lead are outside control limits. Spike recovery indicates possible matrix interference and/or sample nonhomogeneity. Post spike within acceptable range.
- RPD(s) for Duplicate for Antimony are outside control limits for sample MP16330-D1. RPD acceptable due to low duplicate and sample concentrations.
- RPD(s) for Serial Dilution for Antimony are outside control limits for sample MP16330-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- M96257-9 for Antimony: Elevated RL due to dilution required for matrix interference.
- MP16330-SD1 for Zinc: Serial dilution indicates possible matrix interference.

Matrix SO

Batch ID: MP16338

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M96289-4DUP, M96289-4MS, M96289-4PS, M96289-4SDL, M96289-4DUP were used as the QC samples for metals.
- Matrix Spike Recovery(s) for Nickel, Antimony, Barium are outside control limits. Spike recovery indicates possible matrix interference and/or sample nonhomogeneity. Post spike is not within acceptable range.
- Matrix Spike Recovery(s) for Lead, Zinc are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
- RPD(s) for Duplicate for Antimony, Barium, Lead, Silver are outside control limits for sample MP16338-D1. High RPD due to possible matrix interference and/or sample non-homogeneity.
- RPD(s) for Serial Dilution for Cadmium are outside control limits for sample MP16338-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- MP16338-S1 for Antimony: Spike recovery indicates possible matrix interference and/or sample nonhomogeneity. Post spike within acceptable range.
- MP16338-S1 for Barium: Spike recovery indicates possible matrix interference and/or sample nonhomogeneity. Post spike within acceptable range.
- MP16338-SD1 for Zinc: Serial dilution indicates possible matrix interference.

Metals By Method SW846 7471A

Matrix SO

Batch ID: MP16331

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M96199-5DUP, M96199-5MS were used as the QC samples for metals.
- Matrix Spike Recovery(s) for Mercury are outside control limits. Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.
- RPD(s) for Duplicate for Mercury are outside control limits for sample MP16331-D1. High RPD due to possible matrix interference and/or sample non-homogeneity.

Matrix SO

Batch ID: MP16345

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M96289-4DUP, M96289-4MS were used as the QC samples for metals.

Wet Chemistry By Method ASTM D1498-76M

Matrix SO

Batch ID: GN33622

- Sample(s) M96225-8DUP were used as the QC samples for Redox Potential Vs H2.
- M96257-1 through M96257-9 for Redox Potential Vs H2: Analysis requested after recommended holding time.
- GN33622-D1 for Redox Potential Vs H2: Analysis requested after recommended holding time.

Wet Chemistry By Method SM21 2540 B MOD.

Matrix SO

Batch ID: GN33610

- Sample(s) M96256-22DUP were used as the QC samples for Solids, Percent.

Matrix SO

Batch ID: GN33620

- Sample(s) M96289-4DUP were used as the QC samples for Solids, Percent.

Wet Chemistry By Method SW846 1020

Matrix SO

Batch ID: GN33600

- Sample(s) M96199-5DUP were used as the QC samples for Ignitability (Flashpoint).

Matrix SO

Batch ID: GN33658

- Sample(s) M96289-4DUP were used as the QC samples for Ignitability (Flashpoint).

Wet Chemistry By Method SW846 CHAP7

Matrix SO

Batch ID: GN33617

- Sample(s) M96225-8DUP were used as the QC samples for Corrosivity as pH.

Matrix SO

Batch ID: GP12387

- All samples were distilled within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M96289-4DUP, M96289-4MS were used as the QC samples for Cyanide Reactivity.

Matrix SO

Batch ID: GP12388

- All samples were distilled within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M96289-4DUP, M96289-4MS were used as the QC samples for Sulfide Reactivity.

Accutest may not have met all requested limits due to methodology limitations, sample matrix, dilutions, or percents solids.

The Accutest Laboratories of New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety. The Accutest Laboratories of NE, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report(M96257).

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	HA106_0-4'	Date Sampled:	12/01/10
Lab Sample ID:	M96257-1	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	90.8
Method:	SW846 8260B		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R18627.D	1	12/07/10	GK	n/a	n/a	MSR663
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	16.5 g	10.0 ml	100 ul
Run #2			

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	190	ug/kg	
71-43-2	Benzene	ND	19	ug/kg	
108-86-1	Bromobenzene	ND	190	ug/kg	
74-97-5	Bromochloromethane	ND	190	ug/kg	
75-27-4	Bromodichloromethane	ND	77	ug/kg	
75-25-2	Bromoform	ND	77	ug/kg	
74-83-9	Bromomethane	ND	77	ug/kg	
78-93-3	2-Butanone (MEK)	ND	190	ug/kg	
104-51-8	n-Butylbenzene	ND	190	ug/kg	
135-98-8	sec-Butylbenzene	ND	190	ug/kg	
98-06-6	tert-Butylbenzene	ND	190	ug/kg	
75-15-0	Carbon disulfide	ND	190	ug/kg	
56-23-5	Carbon tetrachloride	ND	77	ug/kg	
108-90-7	Chlorobenzene	ND	77	ug/kg	
75-00-3	Chloroethane	ND	190	ug/kg	
67-66-3	Chloroform	ND	77	ug/kg	
74-87-3	Chloromethane	ND	190	ug/kg	
95-49-8	o-Chlorotoluene	ND	190	ug/kg	
106-43-4	p-Chlorotoluene	ND	190	ug/kg	
108-20-3	Di-Isopropyl ether	ND	77	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	190	ug/kg	
124-48-1	Dibromochloromethane	ND	77	ug/kg	
106-93-4	1,2-Dibromoethane	ND	77	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	77	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	77	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	77	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	77	ug/kg	
75-34-3	1,1-Dichloroethane	ND	77	ug/kg	
107-06-2	1,2-Dichloroethane	ND	77	ug/kg	
75-35-4	1,1-Dichloroethene	ND	77	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	77	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	77	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA106_0-4'	Date Sampled:	12/01/10
Lab Sample ID:	M96257-1	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	90.8
Method:	SW846 8260B		
Project:	Former Energy International Parcel, MA		

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
78-87-5	1,2-Dichloropropane	ND	77	ug/kg	
142-28-9	1,3-Dichloropropane	ND	190	ug/kg	
594-20-7	2,2-Dichloropropane	ND	190	ug/kg	
563-58-6	1,1-Dichloropropene	ND	190	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	77	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	77	ug/kg	
123-91-1	1,4-Dioxane	ND	960	ug/kg	
60-29-7	Ethyl Ether	ND	190	ug/kg	
100-41-4	Ethylbenzene	ND	77	ug/kg	
87-68-3	Hexachlorobutadiene	ND	190	ug/kg	
591-78-6	2-Hexanone	ND	190	ug/kg	
98-82-8	Isopropylbenzene	ND	190	ug/kg	
99-87-6	p-Isopropyltoluene	ND	190	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	77	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	190	ug/kg	
74-95-3	Methylene bromide	ND	190	ug/kg	
75-09-2	Methylene chloride	ND	77	ug/kg	
91-20-3	Naphthalene	ND	190	ug/kg	
103-65-1	n-Propylbenzene	ND	190	ug/kg	
100-42-5	Styrene	ND	190	ug/kg	
994-05-8	tert-Amyl Methyl Ether	ND	190	ug/kg	
637-92-3	tert-Butyl Ethyl Ether	ND	77	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	190	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	77	ug/kg	
127-18-4	Tetrachloroethene	ND	77	ug/kg	
109-99-9	Tetrahydrofuran	ND	380	ug/kg	
108-88-3	Toluene	ND	190	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	190	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	190	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	77	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	77	ug/kg	
79-01-6	Trichloroethene	ND	77	ug/kg	
75-69-4	Trichlorofluoromethane	ND	77	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	190	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	190	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	190	ug/kg	
75-01-4	Vinyl chloride	ND	77	ug/kg	
	m,p-Xylene	ND	77	ug/kg	
95-47-6	o-Xylene	ND	77	ug/kg	
1330-20-7	Xylene (total)	ND	77	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA106_0-4'**Lab Sample ID:** M96257-1**Matrix:** SO - Soil**Method:** SW846 8260B**Project:** Former Energy International Parcel, MA**Date Sampled:** 12/01/10**Date Received:** 12/01/10**Percent Solids:** 90.8

VOA MCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		70-130%
2037-26-5	Toluene-D8	107%		70-130%
460-00-4	4-Bromofluorobenzene	104%		70-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA106_0-4'	Date Sampled:	12/01/10
Lab Sample ID:	M96257-1	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	90.8
Method:	SW846 8270C SW846 3510C		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	S19963.D	1	12/13/10	PR	12/06/10	OP23538	MSS826
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.3 g	1.0 ml
Run #2		

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
65-85-0	Benzoic acid	ND	540	ug/kg	
95-57-8	2-Chlorophenol	ND	270	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	540	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	540	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	540	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1100	ug/kg	
95-48-7	2-Methylphenol	ND	540	ug/kg	
	3&4-Methylphenol	ND	540	ug/kg	
88-75-5	2-Nitrophenol	ND	540	ug/kg	
100-02-7	4-Nitrophenol	ND	1100	ug/kg	
87-86-5	Pentachlorophenol	ND	540	ug/kg	
108-95-2	Phenol	ND	270	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	540	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	540	ug/kg	
83-32-9	Acenaphthene	436	270	ug/kg	
208-96-8	Acenaphthylene	ND	270	ug/kg	
98-86-2	Acetophenone	ND	540	ug/kg	
62-53-3	Aniline	ND	540	ug/kg	
120-12-7	Anthracene	914	270	ug/kg	
56-55-3	Benzo(a)anthracene	1560	270	ug/kg	
50-32-8	Benzo(a)pyrene	1250	270	ug/kg	
205-99-2	Benzo(b)fluoranthene	1260	270	ug/kg	
191-24-2	Benzo(g,h,i)perylene	1090	270	ug/kg	
207-08-9	Benzo(k)fluoranthene	1050	270	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	270	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	270	ug/kg	
91-58-7	2-Chloronaphthalene	ND	270	ug/kg	
106-47-8	4-Chloroaniline	ND	540	ug/kg	
218-01-9	Chrysene	1580	270	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	270	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	270	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	270	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA106_0-4'	Date Sampled:	12/01/10
Lab Sample ID:	M96257-1	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	90.8
Method:	SW846 8270C SW846 3510C		
Project:	Former Energy International Parcel, MA		

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	270	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	270	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	270	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	270	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	540	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	540	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	270	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	379	270	ug/kg	
132-64-9	Dibenzofuran	326	270	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	270	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	270	ug/kg	
84-66-2	Diethyl phthalate	ND	270	ug/kg	
131-11-3	Dimethyl phthalate	ND	270	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	270	ug/kg	
206-44-0	Fluoranthene	3020	270	ug/kg	
86-73-7	Fluorene	463	270	ug/kg	
118-74-1	Hexachlorobenzene	ND	270	ug/kg	
87-68-3	Hexachlorobutadiene	ND	270	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	540	ug/kg	
67-72-1	Hexachloroethane	ND	270	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	1030	270	ug/kg	
78-59-1	Isophorone	ND	270	ug/kg	
91-57-6	2-Methylnaphthalene	ND	270	ug/kg	
91-20-3	Naphthalene	396	270	ug/kg	
98-95-3	Nitrobenzene	ND	270	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	270	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	270	ug/kg	
85-01-8	Phenanthrene	3150	270	ug/kg	
129-00-0	Pyrene	2900	270	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	270	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	62%		30-130%
4165-62-2	Phenol-d5	62%		30-130%
118-79-6	2,4,6-Tribromophenol	77%		30-130%
4165-60-0	Nitrobenzene-d5	63%		30-130%
321-60-8	2-Fluorobiphenyl	75%		30-130%
1718-51-0	Terphenyl-d14	81%		30-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA106_0-4'	Date Sampled:	12/01/10
Lab Sample ID:	M96257-1	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	90.8
Method:	MADEP VPH REV 1.1		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	BH17824.D	1	12/07/10	WS	n/a	n/a	GBH929
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	16.5 g	11.0 ml	100 ul
Run #2			

Volatile TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C5- C8 Aliphatics (Unadj.)	ND	4200	ug/kg	
	C9- C12 Aliphatics (Unadj.)	ND	4200	ug/kg	
	C9- C10 Aromatics (Unadj.)	ND	4200	ug/kg	
	C5- C8 Aliphatics	ND	4200	ug/kg	
	C9- C12 Aliphatics	ND	4200	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	88%		70-130%
615-59-8	2,5-Dibromotoluene	83%		70-130%

(a) Soil to methanol ratio greater than 1.25 to 1.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA106_0-4'	Date Sampled:	12/01/10
Lab Sample ID:	M96257-1	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	90.8
Method:	MADEP EPH REV 1.1 SW846 3545		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BI2726.D	1	12/13/10	JD	12/10/10	OP23590	GBI102
Run #2							

Run #	Initial Weight	Final Volume
Run #1	11.5 g	2.0 ml
Run #2		

Extractable TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C11-C22 Aromatics (Unadj.)	51900	19000	ug/kg	
	C9-C18 Aliphatics	ND	9600	ug/kg	
	C19-C36 Aliphatics	39800	9600	ug/kg	
	C11-C22 Aromatics	42500	19000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	95%		40-140%
321-60-8	2-Fluorobiphenyl	84%		40-140%
580-13-2	2-Bromonaphthalene	63%		40-140%
3386-33-2	1-Chlorooctadecane	45%		40-140%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA106_0-4'

Lab Sample ID: M96257-1

Matrix: SO - Soil

Date Sampled: 12/01/10

Date Received: 12/01/10

Percent Solids: 90.8

Project: Former Energy International Parcel, MA

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analized By	Method	Prep Method
Antimony	< 0.85	0.85	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Arsenic	7.8	0.85	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Barium	68.7	4.2	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Beryllium	0.38	0.34	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Cadmium	< 0.34	0.34	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Chromium	14.1	0.85	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Lead	166	0.85	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Mercury	0.44	0.034	mg/kg	1	12/03/10	12/03/10 PY	SW846 7471A ²	SW846 7471A ⁴
Nickel	11.2	3.4	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Selenium	< 0.85	0.85	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Silver	< 0.42	0.42	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Thallium	< 0.85	0.85	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Vanadium	19.9	0.85	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Zinc	88.7	1.7	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³

(1) Instrument QC Batch: MA12490

(2) Instrument QC Batch: MA12492

(3) Prep QC Batch: MP16330

(4) Prep QC Batch: MP16331

RL = Reporting Limit

Report of Analysis

Client Sample ID: HA106_0-4'**Lab Sample ID:** M96257-1**Matrix:** SO - Soil**Date Sampled:** 12/01/10**Date Received:** 12/01/10**Percent Solids:** 90.8**Project:** Former Energy International Parcel, MA

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Corrosivity as pH	8.4			1	12/03/10	MA	SW846 CHAP7
Cyanide Reactivity	< 1.7	1.7	mg/kg	1	12/08/10	BF	SW846 CHAP7
Ignitability (Flashpoint)	> 230		Deg. F	1	12/08/10	BF	SW846 1020
Redox Potential Vs H2 ^a	446		mv	1	12/03/10	MC	ASTM D1498-76M
Solids, Percent	90.8		%	1	12/03/10	HS	SM21 2540 B MOD.
Sulfide Reactivity	< 55	55	mg/kg	1	12/08/10	BF	SW846 CHAP7

(a) Analysis requested after recommended holding time.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HA106_0-4'		
Lab Sample ID:	M96257-1A	Date Sampled:	12/01/10
Matrix:	SO - Soil	Date Received:	12/01/10
		Percent Solids:	90.8
Project:	Former Energy International Parcel, MA		

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	0.28	D008	5.0	0.010	mg/l	1	12/07/10	12/07/10 DA	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA12502
(2) Prep QC Batch: MP16339

RL = Reporting Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)

Report of Analysis

Client Sample ID:	HA106_8-12.5'	Date Sampled:	12/01/10
Lab Sample ID:	M96257-2	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	79.7
Method:	SW846 8260B		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R18633.D	1	12/07/10	GK	n/a	n/a	MSR663
Run #2 ^a	R18693.D	1	12/09/10	GK	n/a	n/a	MSR666

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	12.3 g	10.0 ml	100 ul
Run #2	12.3 g	10.0 ml	100 ul

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	320	ug/kg	
71-43-2	Benzene	102	32	ug/kg	
108-86-1	Bromobenzene	ND	320	ug/kg	
74-97-5	Bromochloromethane	ND	320	ug/kg	
75-27-4	Bromodichloromethane	ND	130	ug/kg	
75-25-2	Bromoform	ND	130	ug/kg	
74-83-9	Bromomethane	ND	130	ug/kg	
78-93-3	2-Butanone (MEK)	ND	320	ug/kg	
104-51-8	n-Butylbenzene	ND	320	ug/kg	
135-98-8	sec-Butylbenzene	ND	320	ug/kg	
98-06-6	tert-Butylbenzene	ND	320	ug/kg	
75-15-0	Carbon disulfide	ND	320	ug/kg	
56-23-5	Carbon tetrachloride	ND	130	ug/kg	
108-90-7	Chlorobenzene	ND	130	ug/kg	
75-00-3	Chloroethane	ND	320	ug/kg	
67-66-3	Chloroform	ND	130	ug/kg	
74-87-3	Chloromethane	ND	320	ug/kg	
95-49-8	o-Chlorotoluene	ND	320	ug/kg	
106-43-4	p-Chlorotoluene	ND	320	ug/kg	
108-20-3	Di-Isopropyl ether	ND	130	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	320	ug/kg	
124-48-1	Dibromochloromethane	ND	130	ug/kg	
106-93-4	1,2-Dibromoethane	ND	130	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	130	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	130	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	130	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	130	ug/kg	
75-34-3	1,1-Dichloroethane	ND	130	ug/kg	
107-06-2	1,2-Dichloroethane	ND	130	ug/kg	
75-35-4	1,1-Dichloroethene	ND	130	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	130	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	130	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA106_8-12.5'

Lab Sample ID: M96257-2

Date Sampled: 12/01/10

Matrix: SO - Soil

Date Received: 12/01/10

Method: SW846 8260B

Percent Solids: 79.7

Project: Former Energy International Parcel, MA

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
78-87-5	1,2-Dichloropropane	ND	130	ug/kg	
142-28-9	1,3-Dichloropropane	ND	320	ug/kg	
594-20-7	2,2-Dichloropropane	ND	320	ug/kg	
563-58-6	1,1-Dichloropropene	ND	320	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	130	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	130	ug/kg	
123-91-1	1,4-Dioxane	ND	1600	ug/kg	
60-29-7	Ethyl Ether	ND	320	ug/kg	
100-41-4	Ethylbenzene	ND	130	ug/kg	
87-68-3	Hexachlorobutadiene	ND	320	ug/kg	
591-78-6	2-Hexanone	ND	320	ug/kg	
98-82-8	Isopropylbenzene	ND	320	ug/kg	
99-87-6	p-Isopropyltoluene	ND	320	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	130	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	320	ug/kg	
74-95-3	Methylene bromide	ND	320	ug/kg	
75-09-2	Methylene chloride	ND	130	ug/kg	
91-20-3	Naphthalene	5750	320	ug/kg	
103-65-1	n-Propylbenzene	ND	320	ug/kg	
100-42-5	Styrene	ND	320	ug/kg	
994-05-8	tert-Amyl Methyl Ether	ND	320	ug/kg	
637-92-3	tert-Butyl Ethyl Ether	ND	130	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	320	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	130	ug/kg	
127-18-4	Tetrachloroethene	ND	130	ug/kg	
109-99-9	Tetrahydrofuran	ND	640	ug/kg	
108-88-3	Toluene	ND	320	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	320	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	320	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	130	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	130	ug/kg	
79-01-6	Trichloroethene	ND	130	ug/kg	
75-69-4	Trichlorofluoromethane	ND	130	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	320	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	545	320	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	320	ug/kg	
75-01-4	Vinyl chloride	ND	130	ug/kg	
	m,p-Xylene	351	130	ug/kg	
95-47-6	o-Xylene	ND	130	ug/kg	
1330-20-7	Xylene (total)	466	130	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA106_8-12.5'**Lab Sample ID:** M96257-2**Matrix:** SO - Soil**Method:** SW846 8260B**Project:** Former Energy International Parcel, MA**Date Sampled:** 12/01/10**Date Received:** 12/01/10**Percent Solids:** 79.7

VOA MCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	18% ^b	14% ^b	70-130%
2037-26-5	Toluene-D8	116%	100%	70-130%
460-00-4	4-Bromofluorobenzene	94%	120%	70-130%

(a) Confirmation run for surrogate recoveries.

(b) Outside control limits due to possible matrix interference. Confirmed by reanalysis.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA106_8-12.5'	Date Sampled:	12/01/10
Lab Sample ID:	M96257-2	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	79.7
Method:	SW846 8270C SW846 3510C		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	S19964.D	20	12/13/10	PR	12/06/10	OP23538	MSS826
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.1 g	1.0 ml
Run #2		

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
65-85-0	Benzoic acid	ND	13000	ug/kg	
95-57-8	2-Chlorophenol	ND	6300	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	13000	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	13000	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	13000	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	25000	ug/kg	
95-48-7	2-Methylphenol	ND	13000	ug/kg	
	3&4-Methylphenol	ND	13000	ug/kg	
88-75-5	2-Nitrophenol	ND	13000	ug/kg	
100-02-7	4-Nitrophenol	ND	25000	ug/kg	
87-86-5	Pentachlorophenol	ND	13000	ug/kg	
108-95-2	Phenol	ND	6300	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	13000	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	13000	ug/kg	
83-32-9	Acenaphthene	ND	6300	ug/kg	
208-96-8	Acenaphthylene	9470	6300	ug/kg	
98-86-2	Acetophenone	ND	13000	ug/kg	
62-53-3	Aniline	ND	13000	ug/kg	
120-12-7	Anthracene	11200	6300	ug/kg	
56-55-3	Benzo(a)anthracene	38900	6300	ug/kg	
50-32-8	Benzo(a)pyrene	16600	6300	ug/kg	
205-99-2	Benzo(b)fluoranthene	19700	6300	ug/kg	
191-24-2	Benzo(g,h,i)perylene	13500	6300	ug/kg	
207-08-9	Benzo(k)fluoranthene	7010	6300	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	6300	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	6300	ug/kg	
91-58-7	2-Chloronaphthalene	ND	6300	ug/kg	
106-47-8	4-Chloroaniline	ND	13000	ug/kg	
218-01-9	Chrysene	69200	6300	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	6300	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	6300	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	6300	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA106_8-12.5'

Lab Sample ID: M96257-2

Date Sampled: 12/01/10

Matrix: SO - Soil

Date Received: 12/01/10

Method: SW846 8270C SW846 3510C

Percent Solids: 79.7

Project: Former Energy International Parcel, MA

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	6300	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	6300	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	6300	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	6300	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	13000	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	13000	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	6300	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	19000	6300	ug/kg	
132-64-9	Dibenzofuran	8210	6300	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	6300	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	6300	ug/kg	
84-66-2	Diethyl phthalate	ND	6300	ug/kg	
131-11-3	Dimethyl phthalate	ND	6300	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	6300	ug/kg	
206-44-0	Fluoranthene	25200	6300	ug/kg	
86-73-7	Fluorene	10600	6300	ug/kg	
118-74-1	Hexachlorobenzene	ND	6300	ug/kg	
87-68-3	Hexachlorobutadiene	ND	6300	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	13000	ug/kg	
67-72-1	Hexachloroethane	ND	6300	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	10900	6300	ug/kg	
78-59-1	Isophorone	ND	6300	ug/kg	
91-57-6	2-Methylnaphthalene	9330	6300	ug/kg	
91-20-3	Naphthalene	35100	6300	ug/kg	
98-95-3	Nitrobenzene	ND	6300	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	6300	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	6300	ug/kg	
85-01-8	Phenanthrene	39500	6300	ug/kg	
129-00-0	Pyrene	22600	6300	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	6300	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	61%		30-130%
4165-62-2	Phenol-d5	60%		30-130%
118-79-6	2,4,6-Tribromophenol	59%		30-130%
4165-60-0	Nitrobenzene-d5	58%		30-130%
321-60-8	2-Fluorobiphenyl	70%		30-130%
1718-51-0	Terphenyl-d14	78%		30-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA106_8-12.5'	Date Sampled:	12/01/10
Lab Sample ID:	M96257-2	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	79.7
Method:	MADEP VPH REV 1.1		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BH17825.D	1	12/07/10	WS	n/a	n/a	GBH929
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	12.3 g	11.0 ml	100 ul
Run #2			

Volatile TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C5- C8 Aliphatics (Unadj.)	17100	6900	ug/kg	
	C9- C12 Aliphatics (Unadj.)	24500	6900	ug/kg	
	C9- C10 Aromatics (Unadj.)	18200	6900	ug/kg	
	C5- C8 Aliphatics	16800	6900	ug/kg	
	C9- C12 Aliphatics	ND	6900	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	128%		70-130%
615-59-8	2,5-Dibromotoluene	119%		70-130%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA106_8-12.5'	Date Sampled:	12/01/10
Lab Sample ID:	M96257-2	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	79.7
Method:	MADEP EPH REV 1.1 SW846 3545		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BI2753.D	5	12/14/10	JD	12/10/10	OP23590	GBI102
Run #2							

	Initial Weight	Final Volume
Run #1	11.5 g	2.0 ml
Run #2		

Extractable TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C11-C22 Aromatics (Unadj.) ^a	5510000	110000	ug/kg	
	C9-C18 Aliphatics ^a	265000	55000	ug/kg	
	C19-C36 Aliphatics ^a	4860000	55000	ug/kg	
	C11-C22 Aromatics ^a	5300000	110000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	167% ^b		40-140%
321-60-8	2-Fluorobiphenyl	89%		40-140%
580-13-2	2-Bromonaphthalene	71%		40-140%
3386-33-2	1-Chlorooctadecane	62%		40-140%

(a) Elevated RL due to dilution required for matrix interference.

(b) Outside control limits due to matrix interference. Confirmed by reanalysis.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA106_8-12.5'**Lab Sample ID:** M96257-2**Matrix:** SO - Soil**Date Sampled:** 12/01/10**Date Received:** 12/01/10**Percent Solids:** 79.7**Project:** Former Energy International Parcel, MA

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analized By	Method	Prep Method
Antimony	7.6	0.97	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Arsenic	16.0	0.97	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Barium	128	4.8	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Beryllium	< 0.39	0.39	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Cadmium	0.75	0.39	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Chromium	10.9	0.97	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Lead	588	0.97	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Mercury	1.6	0.11	mg/kg	3	12/03/10	12/03/10 PY	SW846 7471A ²	SW846 7471A ⁴
Nickel	11.3	3.9	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Selenium	3.9	0.97	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Silver	1.3	0.48	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Thallium	< 0.97	0.97	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Vanadium	16.8	0.97	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Zinc	372	1.9	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³

(1) Instrument QC Batch: MA12490

(2) Instrument QC Batch: MA12492

(3) Prep QC Batch: MP16330

(4) Prep QC Batch: MP16331

RL = Reporting Limit

Report of Analysis

Client Sample ID: HA106_8-12.5'**Lab Sample ID:** M96257-2**Matrix:** SO - Soil**Date Sampled:** 12/01/10**Date Received:** 12/01/10**Percent Solids:** 79.7**Project:** Former Energy International Parcel, MA

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Corrosivity as pH	7.5			1	12/03/10	MA	SW846 CHAP7
Cyanide Reactivity	< 1.9	1.9	mg/kg	1	12/08/10	BF	SW846 CHAP7
Ignitability (Flashpoint)	> 230		Deg. F	1	12/08/10	BF	SW846 1020
Redox Potential Vs H2 ^a	322		mv	1	12/03/10	MC	ASTM D1498-76M
Solids, Percent	79.7		%	1	12/03/10	HS	SM21 2540 B MOD.
Sulfide Reactivity	< 63	63	mg/kg	1	12/08/10	BF	SW846 CHAP7

(a) Analysis requested after recommended holding time.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HA106_8-12.5'		
Lab Sample ID:	M96257-2A	Date Sampled:	12/01/10
Matrix:	SO - Soil	Date Received:	12/01/10
		Percent Solids:	79.7
Project:	Former Energy International Parcel, MA		

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	1.7	D008	5.0	0.010	mg/l	1	12/07/10	12/07/10 DA	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA12502
(2) Prep QC Batch: MP16339

RL = Reporting Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)

Report of Analysis

Client Sample ID:	HA105_0-4'	Date Sampled:	12/01/10
Lab Sample ID:	M96257-3	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	89.1
Method:	SW846 8260B		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R18631.D	1	12/07/10	GK	n/a	n/a	MSR663
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	13.2 g	10.0 ml	100 ul
Run #2			

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	240	ug/kg	
71-43-2	Benzene	37.7	24	ug/kg	
108-86-1	Bromobenzene	ND	240	ug/kg	
74-97-5	Bromochloromethane	ND	240	ug/kg	
75-27-4	Bromodichloromethane	ND	97	ug/kg	
75-25-2	Bromoform	ND	97	ug/kg	
74-83-9	Bromomethane	ND	97	ug/kg	
78-93-3	2-Butanone (MEK)	ND	240	ug/kg	
104-51-8	n-Butylbenzene	ND	240	ug/kg	
135-98-8	sec-Butylbenzene	ND	240	ug/kg	
98-06-6	tert-Butylbenzene	ND	240	ug/kg	
75-15-0	Carbon disulfide	ND	240	ug/kg	
56-23-5	Carbon tetrachloride	ND	97	ug/kg	
108-90-7	Chlorobenzene	ND	97	ug/kg	
75-00-3	Chloroethane	ND	240	ug/kg	
67-66-3	Chloroform	ND	97	ug/kg	
74-87-3	Chloromethane	ND	240	ug/kg	
95-49-8	o-Chlorotoluene	ND	240	ug/kg	
106-43-4	p-Chlorotoluene	ND	240	ug/kg	
108-20-3	Di-Isopropyl ether	ND	97	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	240	ug/kg	
124-48-1	Dibromochloromethane	ND	97	ug/kg	
106-93-4	1,2-Dibromoethane	ND	97	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	97	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	97	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	97	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	97	ug/kg	
75-34-3	1,1-Dichloroethane	ND	97	ug/kg	
107-06-2	1,2-Dichloroethane	ND	97	ug/kg	
75-35-4	1,1-Dichloroethene	ND	97	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	97	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	97	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA105_0-4'	Date Sampled:	12/01/10
Lab Sample ID:	M96257-3	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	89.1
Method:	SW846 8260B		
Project:	Former Energy International Parcel, MA		

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
78-87-5	1,2-Dichloropropane	ND	97	ug/kg	
142-28-9	1,3-Dichloropropane	ND	240	ug/kg	
594-20-7	2,2-Dichloropropane	ND	240	ug/kg	
563-58-6	1,1-Dichloropropene	ND	240	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	97	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	97	ug/kg	
123-91-1	1,4-Dioxane	ND	1200	ug/kg	
60-29-7	Ethyl Ether	ND	240	ug/kg	
100-41-4	Ethylbenzene	ND	97	ug/kg	
87-68-3	Hexachlorobutadiene	ND	240	ug/kg	
591-78-6	2-Hexanone	ND	240	ug/kg	
98-82-8	Isopropylbenzene	ND	240	ug/kg	
99-87-6	p-Isopropyltoluene	ND	240	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	97	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	240	ug/kg	
74-95-3	Methylene bromide	ND	240	ug/kg	
75-09-2	Methylene chloride	ND	97	ug/kg	
91-20-3	Naphthalene	ND	240	ug/kg	
103-65-1	n-Propylbenzene	ND	240	ug/kg	
100-42-5	Styrene	ND	240	ug/kg	
994-05-8	tert-Amyl Methyl Ether	ND	240	ug/kg	
637-92-3	tert-Butyl Ethyl Ether	ND	97	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	240	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	97	ug/kg	
127-18-4	Tetrachloroethene	ND	97	ug/kg	
109-99-9	Tetrahydrofuran	ND	490	ug/kg	
108-88-3	Toluene	ND	240	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	240	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	240	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	97	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	97	ug/kg	
79-01-6	Trichloroethene	ND	97	ug/kg	
75-69-4	Trichlorofluoromethane	ND	97	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	240	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	240	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	240	ug/kg	
75-01-4	Vinyl chloride	ND	97	ug/kg	
	m,p-Xylene	ND	97	ug/kg	
95-47-6	o-Xylene	ND	97	ug/kg	
1330-20-7	Xylene (total)	ND	97	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA105_0-4'	Date Sampled:	12/01/10
Lab Sample ID:	M96257-3	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	89.1
Method:	SW846 8260B		
Project:	Former Energy International Parcel, MA		

VOA MCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	112%		70-130%
2037-26-5	Toluene-D8	113%		70-130%
460-00-4	4-Bromofluorobenzene	105%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA105_0-4'	Date Sampled:	12/01/10
Lab Sample ID:	M96257-3	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	89.1
Method:	SW846 8270C SW846 3510C		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	S19965.D	1	12/13/10	PR	12/06/10	OP23538	MSS826
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.2 g	1.0 ml
Run #2		

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
65-85-0	Benzoic acid	ND	560	ug/kg	
95-57-8	2-Chlorophenol	ND	280	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	560	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	560	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	560	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1100	ug/kg	
95-48-7	2-Methylphenol	ND	560	ug/kg	
	3&4-Methylphenol	ND	560	ug/kg	
88-75-5	2-Nitrophenol	ND	560	ug/kg	
100-02-7	4-Nitrophenol	ND	1100	ug/kg	
87-86-5	Pentachlorophenol	ND	560	ug/kg	
108-95-2	Phenol	ND	280	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	560	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	560	ug/kg	
83-32-9	Acenaphthene	ND	280	ug/kg	
208-96-8	Acenaphthylene	ND	280	ug/kg	
98-86-2	Acetophenone	ND	560	ug/kg	
62-53-3	Aniline	ND	560	ug/kg	
120-12-7	Anthracene	683	280	ug/kg	
56-55-3	Benzo(a)anthracene	1320	280	ug/kg	
50-32-8	Benzo(a)pyrene	1070	280	ug/kg	
205-99-2	Benzo(b)fluoranthene	1040	280	ug/kg	
191-24-2	Benzo(g,h,i)perylene	967	280	ug/kg	
207-08-9	Benzo(k)fluoranthene	921	280	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	280	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	280	ug/kg	
91-58-7	2-Chloronaphthalene	ND	280	ug/kg	
106-47-8	4-Chloroaniline	ND	560	ug/kg	
218-01-9	Chrysene	1380	280	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	280	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	280	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	280	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA105_0-4'	Date Sampled:	12/01/10
Lab Sample ID:	M96257-3	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	89.1
Method:	SW846 8270C SW846 3510C		
Project:	Former Energy International Parcel, MA		

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	280	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	280	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	280	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	280	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	560	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	560	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	280	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	350	280	ug/kg	
132-64-9	Dibenzofuran	ND	280	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	280	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	280	ug/kg	
84-66-2	Diethyl phthalate	ND	280	ug/kg	
131-11-3	Dimethyl phthalate	ND	280	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	280	ug/kg	
206-44-0	Fluoranthene	2280	280	ug/kg	
86-73-7	Fluorene	281	280	ug/kg	
118-74-1	Hexachlorobenzene	ND	280	ug/kg	
87-68-3	Hexachlorobutadiene	ND	280	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	560	ug/kg	
67-72-1	Hexachloroethane	ND	280	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	937	280	ug/kg	
78-59-1	Isophorone	ND	280	ug/kg	
91-57-6	2-Methylnaphthalene	ND	280	ug/kg	
91-20-3	Naphthalene	344	280	ug/kg	
98-95-3	Nitrobenzene	ND	280	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	280	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	280	ug/kg	
85-01-8	Phenanthrene	2070	280	ug/kg	
129-00-0	Pyrene	2260	280	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	280	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	67%		30-130%
4165-62-2	Phenol-d5	66%		30-130%
118-79-6	2,4,6-Tribromophenol	85%		30-130%
4165-60-0	Nitrobenzene-d5	65%		30-130%
321-60-8	2-Fluorobiphenyl	77%		30-130%
1718-51-0	Terphenyl-d14	81%		30-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA105_0-4'	Date Sampled:	12/01/10
Lab Sample ID:	M96257-3	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	89.1
Method:	MADEP VPH REV 1.1		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	BH17826.D	1	12/07/10	WS	n/a	n/a	GBH929
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	13.2 g	11.0 ml	100 ul
Run #2			

Volatile TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C5- C8 Aliphatics (Unadj.)	8850	5300	ug/kg	
	C9- C12 Aliphatics (Unadj.)	17100	5300	ug/kg	
	C9- C10 Aromatics (Unadj.)	17300	5300	ug/kg	
	C5- C8 Aliphatics	8770	5300	ug/kg	
	C9- C12 Aliphatics	ND	5300	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	122%		70-130%
615-59-8	2,5-Dibromotoluene	117%		70-130%

(a) Soil to methanol ratio greater than 1.25 to 1.

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA105_0-4'	Date Sampled:	12/01/10
Lab Sample ID:	M96257-3	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	89.1
Method:	MADEP EPH REV 1.1 SW846 3545		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BI2735.D	1	12/14/10	JD	12/10/10	OP23590	GBI102
Run #2							

	Initial Weight	Final Volume
Run #1	11.7 g	2.0 ml
Run #2		

Extractable TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C11-C22 Aromatics (Unadj.)	158000	19000	ug/kg	
	C9-C18 Aliphatics	16700	9600	ug/kg	
	C19-C36 Aliphatics	88200	9600	ug/kg	
	C11-C22 Aromatics	129000	19000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	120%		40-140%
321-60-8	2-Fluorobiphenyl	80%		40-140%
580-13-2	2-Bromonaphthalene	74%		40-140%
3386-33-2	1-Chlorooctadecane	41%		40-140%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA105_0-4'

Lab Sample ID: M96257-3

Matrix: SO - Soil

Date Sampled: 12/01/10

Date Received: 12/01/10

Percent Solids: 89.1

Project: Former Energy International Parcel, MA

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analized By	Method	Prep Method
Antimony	0.88	0.84	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Arsenic	8.4	0.84	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Barium	81.5	4.2	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Beryllium	0.41	0.34	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Cadmium	0.48	0.34	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Chromium	13.9	0.84	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Lead	190	0.84	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Mercury	1.4	0.072	mg/kg	2	12/03/10	12/03/10 PY	SW846 7471A ²	SW846 7471A ⁴
Nickel	17.3	3.4	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Selenium	< 0.84	0.84	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Silver	< 0.42	0.42	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Thallium	< 0.84	0.84	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Vanadium	20.8	0.84	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Zinc	182	1.7	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³

(1) Instrument QC Batch: MA12490

(2) Instrument QC Batch: MA12492

(3) Prep QC Batch: MP16330

(4) Prep QC Batch: MP16331

RL = Reporting Limit

Report of Analysis

Client Sample ID: HA105_0-4'**Lab Sample ID:** M96257-3**Matrix:** SO - Soil**Date Sampled:** 12/01/10**Date Received:** 12/01/10**Percent Solids:** 89.1**Project:** Former Energy International Parcel, MA

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Corrosivity as pH	8.0			1	12/03/10	MA	SW846 CHAP7
Cyanide Reactivity	< 1.7	1.7	mg/kg	1	12/08/10	BF	SW846 CHAP7
Ignitability (Flashpoint)	> 230		Deg. F	1	12/08/10	BF	SW846 1020
Redox Potential Vs H2 ^a	364		mv	1	12/03/10	MC	ASTM D1498-76M
Solids, Percent	89.1		%	1	12/03/10	HS	SM21 2540 B MOD.
Sulfide Reactivity	< 56	56	mg/kg	1	12/08/10	BF	SW846 CHAP7

(a) Analysis requested after recommended holding time.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HA105_0-4'	Date Sampled:	12/01/10
Lab Sample ID:	M96257-3A	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	89.1
Project:	Former Energy International Parcel, MA		

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	0.36	D008	5.0	0.010	mg/l	1	12/07/10	12/07/10 DA	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA12502
(2) Prep QC Batch: MP16339

RL = Reporting Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)

Report of Analysis

Client Sample ID:	HA105_4-8'	Date Sampled:	12/01/10
Lab Sample ID:	M96257-4	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	84.9
Method:	SW846 8260B		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R18628.D	1	12/07/10	GK	n/a	n/a	MSR663
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	11.9 g	10.0 ml	100 ul
Run #2			

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	290	ug/kg	
71-43-2	Benzene	ND	29	ug/kg	
108-86-1	Bromobenzene	ND	290	ug/kg	
74-97-5	Bromochloromethane	ND	290	ug/kg	
75-27-4	Bromodichloromethane	ND	120	ug/kg	
75-25-2	Bromoform	ND	120	ug/kg	
74-83-9	Bromomethane	ND	120	ug/kg	
78-93-3	2-Butanone (MEK)	ND	290	ug/kg	
104-51-8	n-Butylbenzene	ND	290	ug/kg	
135-98-8	sec-Butylbenzene	ND	290	ug/kg	
98-06-6	tert-Butylbenzene	ND	290	ug/kg	
75-15-0	Carbon disulfide	ND	290	ug/kg	
56-23-5	Carbon tetrachloride	ND	120	ug/kg	
108-90-7	Chlorobenzene	ND	120	ug/kg	
75-00-3	Chloroethane	ND	290	ug/kg	
67-66-3	Chloroform	ND	120	ug/kg	
74-87-3	Chloromethane	ND	290	ug/kg	
95-49-8	o-Chlorotoluene	ND	290	ug/kg	
106-43-4	p-Chlorotoluene	ND	290	ug/kg	
108-20-3	Di-Isopropyl ether	ND	120	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	290	ug/kg	
124-48-1	Dibromochloromethane	ND	120	ug/kg	
106-93-4	1,2-Dibromoethane	ND	120	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	120	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	120	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	120	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	120	ug/kg	
75-34-3	1,1-Dichloroethane	ND	120	ug/kg	
107-06-2	1,2-Dichloroethane	ND	120	ug/kg	
75-35-4	1,1-Dichloroethene	ND	120	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	120	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	120	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA105_4-8'	Date Sampled:	12/01/10
Lab Sample ID:	M96257-4	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	84.9
Method:	SW846 8260B		
Project:	Former Energy International Parcel, MA		

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
78-87-5	1,2-Dichloropropane	ND	120	ug/kg	
142-28-9	1,3-Dichloropropane	ND	290	ug/kg	
594-20-7	2,2-Dichloropropane	ND	290	ug/kg	
563-58-6	1,1-Dichloropropene	ND	290	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	120	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	120	ug/kg	
123-91-1	1,4-Dioxane	ND	1500	ug/kg	
60-29-7	Ethyl Ether	ND	290	ug/kg	
100-41-4	Ethylbenzene	ND	120	ug/kg	
87-68-3	Hexachlorobutadiene	ND	290	ug/kg	
591-78-6	2-Hexanone	ND	290	ug/kg	
98-82-8	Isopropylbenzene	ND	290	ug/kg	
99-87-6	p-Isopropyltoluene	ND	290	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	120	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	290	ug/kg	
74-95-3	Methylene bromide	ND	290	ug/kg	
75-09-2	Methylene chloride	ND	120	ug/kg	
91-20-3	Naphthalene	ND	290	ug/kg	
103-65-1	n-Propylbenzene	ND	290	ug/kg	
100-42-5	Styrene	ND	290	ug/kg	
994-05-8	tert-Amyl Methyl Ether	ND	290	ug/kg	
637-92-3	tert-Butyl Ethyl Ether	ND	120	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	290	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	120	ug/kg	
127-18-4	Tetrachloroethene	ND	120	ug/kg	
109-99-9	Tetrahydrofuran	ND	580	ug/kg	
108-88-3	Toluene	ND	290	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	290	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	290	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	120	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	120	ug/kg	
79-01-6	Trichloroethene	ND	120	ug/kg	
75-69-4	Trichlorofluoromethane	ND	120	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	290	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	290	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	290	ug/kg	
75-01-4	Vinyl chloride	ND	120	ug/kg	
	m,p-Xylene	ND	120	ug/kg	
95-47-6	o-Xylene	ND	120	ug/kg	
1330-20-7	Xylene (total)	ND	120	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA105_4-8'**Lab Sample ID:** M96257-4**Matrix:** SO - Soil**Method:** SW846 8260B**Project:** Former Energy International Parcel, MA**Date Sampled:** 12/01/10**Date Received:** 12/01/10**Percent Solids:** 84.9

VOA MCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	114%		70-130%
2037-26-5	Toluene-D8	112%		70-130%
460-00-4	4-Bromofluorobenzene	111%		70-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA105_4-8'	Date Sampled:	12/01/10
Lab Sample ID:	M96257-4	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	84.9
Method:	SW846 8270C SW846 3510C		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	S19966.D	1	12/13/10	PR	12/06/10	OP23538	MSS826
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.2 g	1.0 ml
Run #2		

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
65-85-0	Benzoic acid	ND	580	ug/kg	
95-57-8	2-Chlorophenol	ND	290	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	580	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	580	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	580	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1200	ug/kg	
95-48-7	2-Methylphenol	ND	580	ug/kg	
	3&4-Methylphenol	ND	580	ug/kg	
88-75-5	2-Nitrophenol	ND	580	ug/kg	
100-02-7	4-Nitrophenol	ND	1200	ug/kg	
87-86-5	Pentachlorophenol	ND	580	ug/kg	
108-95-2	Phenol	ND	290	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	580	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	580	ug/kg	
83-32-9	Acenaphthene	ND	290	ug/kg	
208-96-8	Acenaphthylene	ND	290	ug/kg	
98-86-2	Acetophenone	ND	580	ug/kg	
62-53-3	Aniline	ND	580	ug/kg	
120-12-7	Anthracene	ND	290	ug/kg	
56-55-3	Benzo(a)anthracene	ND	290	ug/kg	
50-32-8	Benzo(a)pyrene	ND	290	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	290	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	290	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	290	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	290	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	290	ug/kg	
91-58-7	2-Chloronaphthalene	ND	290	ug/kg	
106-47-8	4-Chloroaniline	ND	580	ug/kg	
218-01-9	Chrysene	ND	290	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	290	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	290	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	290	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA105_4-8'	Date Sampled:	12/01/10
Lab Sample ID:	M96257-4	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	84.9
Method:	SW846 8270C SW846 3510C		
Project:	Former Energy International Parcel, MA		

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	290	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	290	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	290	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	290	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	580	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	580	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	290	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	290	ug/kg	
132-64-9	Dibenzofuran	ND	290	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	290	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	290	ug/kg	
84-66-2	Diethyl phthalate	ND	290	ug/kg	
131-11-3	Dimethyl phthalate	ND	290	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	290	ug/kg	
206-44-0	Fluoranthene	514	290	ug/kg	
86-73-7	Fluorene	ND	290	ug/kg	
118-74-1	Hexachlorobenzene	ND	290	ug/kg	
87-68-3	Hexachlorobutadiene	ND	290	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	580	ug/kg	
67-72-1	Hexachloroethane	ND	290	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	290	ug/kg	
78-59-1	Isophorone	ND	290	ug/kg	
91-57-6	2-Methylnaphthalene	ND	290	ug/kg	
91-20-3	Naphthalene	ND	290	ug/kg	
98-95-3	Nitrobenzene	ND	290	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	290	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	290	ug/kg	
85-01-8	Phenanthrene	564	290	ug/kg	
129-00-0	Pyrene	509	290	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	290	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	59%		30-130%
4165-62-2	Phenol-d5	62%		30-130%
118-79-6	2,4,6-Tribromophenol	68%		30-130%
4165-60-0	Nitrobenzene-d5	64%		30-130%
321-60-8	2-Fluorobiphenyl	73%		30-130%
1718-51-0	Terphenyl-d14	84%		30-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA105_4-8'	Date Sampled:	12/01/10
Lab Sample ID:	M96257-4	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	84.9
Method:	MADEP VPH REV 1.1		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BH17827.D	1	12/07/10	WS	n/a	n/a	GBH929
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	11.9 g	11.0 ml	100 ul
Run #2			

Volatile TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C5- C8 Aliphatics (Unadj.)	ND	6300	ug/kg	
	C9- C12 Aliphatics (Unadj.)	8370	6300	ug/kg	
	C9- C10 Aromatics (Unadj.)	8360	6300	ug/kg	
	C5- C8 Aliphatics	ND	6300	ug/kg	
	C9- C12 Aliphatics	ND	6300	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	119%		70-130%
615-59-8	2,5-Dibromotoluene	114%		70-130%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA105_4-8'		
Lab Sample ID:	M96257-4	Date Sampled:	12/01/10
Matrix:	SO - Soil	Date Received:	12/01/10
Method:	MADEP EPH REV 1.1 SW846 3545	Percent Solids:	84.9
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BI2789.D	1	12/16/10	JD	12/10/10	OP23590	GBI104
Run #2							

	Initial Weight	Final Volume
Run #1	11.1 g	2.0 ml
Run #2		

Extractable TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C11-C22 Aromatics (Unadj.)	ND	21000	ug/kg	
	C9-C18 Aliphatics	ND	11000	ug/kg	
	C19-C36 Aliphatics	21800	11000	ug/kg	
	C11-C22 Aromatics	ND	21000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	62%		40-140%
321-60-8	2-Fluorobiphenyl	71%		40-140%
580-13-2	2-Bromonaphthalene	43%		40-140%
3386-33-2	1-Chlorooctadecane	57%		40-140%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA105_4-8'

Lab Sample ID: M96257-4

Matrix: SO - Soil

Date Sampled: 12/01/10

Date Received: 12/01/10

Percent Solids: 84.9

Project: Former Energy International Parcel, MA

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analized By	Method	Prep Method
Antimony	< 0.90	0.90	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Arsenic	7.2	0.90	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Barium	180	4.5	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Beryllium	0.43	0.36	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Cadmium	< 0.36	0.36	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Chromium	10.3	0.90	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Lead	245	0.90	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Mercury	0.87	0.036	mg/kg	1	12/03/10	12/03/10 PY	SW846 7471A ²	SW846 7471A ⁴
Nickel	10.9	3.6	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Selenium	< 0.90	0.90	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Silver	< 0.45	0.45	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Thallium	< 0.90	0.90	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Vanadium	17.8	0.90	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Zinc	128	1.8	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³

(1) Instrument QC Batch: MA12490

(2) Instrument QC Batch: MA12492

(3) Prep QC Batch: MP16330

(4) Prep QC Batch: MP16331

RL = Reporting Limit

Report of Analysis

Client Sample ID: HA105_4-8'**Lab Sample ID:** M96257-4**Matrix:** SO - Soil**Date Sampled:** 12/01/10**Date Received:** 12/01/10**Percent Solids:** 84.9**Project:** Former Energy International Parcel, MA

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Corrosivity as pH	7.7			1	12/03/10	MA	SW846 CHAP7
Cyanide Reactivity	< 1.8	1.8	mg/kg	1	12/08/10	BF	SW846 CHAP7
Ignitability (Flashpoint)	> 230		Deg. F	1	12/08/10	BF	SW846 1020
Redox Potential Vs H2 ^a	387		mv	1	12/03/10	MC	ASTM D1498-76M
Solids, Percent	84.9		%	1	12/03/10	HS	SM21 2540 B MOD.
Sulfide Reactivity	< 59	59	mg/kg	1	12/08/10	BF	SW846 CHAP7

(a) Analysis requested after recommended holding time.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HA105_4-8'	Date Sampled:	12/01/10
Lab Sample ID:	M96257-4A	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	84.9
Project:	Former Energy International Parcel, MA		

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	0.46	D008	5.0	0.010	mg/l	1	12/07/10	12/07/10 DA	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA12502
(2) Prep QC Batch: MP16339

RL = Reporting Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)

Report of Analysis

Client Sample ID:	HA104_0-4'	Date Sampled:	12/01/10
Lab Sample ID:	M96257-5	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	90.6
Method:	SW846 8260B		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R18630.D	1	12/07/10	GK	n/a	n/a	MSR663
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	13.2 g	10.0 ml	100 ul
Run #2			

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	230	ug/kg	
71-43-2	Benzene	ND	23	ug/kg	
108-86-1	Bromobenzene	ND	230	ug/kg	
74-97-5	Bromochloromethane	ND	230	ug/kg	
75-27-4	Bromodichloromethane	ND	94	ug/kg	
75-25-2	Bromoform	ND	94	ug/kg	
74-83-9	Bromomethane	ND	94	ug/kg	
78-93-3	2-Butanone (MEK)	ND	230	ug/kg	
104-51-8	n-Butylbenzene	ND	230	ug/kg	
135-98-8	sec-Butylbenzene	ND	230	ug/kg	
98-06-6	tert-Butylbenzene	ND	230	ug/kg	
75-15-0	Carbon disulfide	ND	230	ug/kg	
56-23-5	Carbon tetrachloride	ND	94	ug/kg	
108-90-7	Chlorobenzene	ND	94	ug/kg	
75-00-3	Chloroethane	ND	230	ug/kg	
67-66-3	Chloroform	ND	94	ug/kg	
74-87-3	Chloromethane	ND	230	ug/kg	
95-49-8	o-Chlorotoluene	ND	230	ug/kg	
106-43-4	p-Chlorotoluene	ND	230	ug/kg	
108-20-3	Di-Isopropyl ether	ND	94	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	230	ug/kg	
124-48-1	Dibromochloromethane	ND	94	ug/kg	
106-93-4	1,2-Dibromoethane	ND	94	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	94	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	94	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	94	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	94	ug/kg	
75-34-3	1,1-Dichloroethane	ND	94	ug/kg	
107-06-2	1,2-Dichloroethane	ND	94	ug/kg	
75-35-4	1,1-Dichloroethene	ND	94	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	94	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	94	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA104_0-4'

Lab Sample ID: M96257-5

Date Sampled: 12/01/10

Matrix: SO - Soil

Date Received: 12/01/10

Method: SW846 8260B

Percent Solids: 90.6

Project: Former Energy International Parcel, MA

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
78-87-5	1,2-Dichloropropane	ND	94	ug/kg	
142-28-9	1,3-Dichloropropane	ND	230	ug/kg	
594-20-7	2,2-Dichloropropane	ND	230	ug/kg	
563-58-6	1,1-Dichloropropene	ND	230	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	94	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	94	ug/kg	
123-91-1	1,4-Dioxane	ND	1200	ug/kg	
60-29-7	Ethyl Ether	ND	230	ug/kg	
100-41-4	Ethylbenzene	ND	94	ug/kg	
87-68-3	Hexachlorobutadiene	ND	230	ug/kg	
591-78-6	2-Hexanone	ND	230	ug/kg	
98-82-8	Isopropylbenzene	ND	230	ug/kg	
99-87-6	p-Isopropyltoluene	ND	230	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	94	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	230	ug/kg	
74-95-3	Methylene bromide	ND	230	ug/kg	
75-09-2	Methylene chloride	ND	94	ug/kg	
91-20-3	Naphthalene	ND	230	ug/kg	
103-65-1	n-Propylbenzene	ND	230	ug/kg	
100-42-5	Styrene	ND	230	ug/kg	
994-05-8	tert-Amyl Methyl Ether	ND	230	ug/kg	
637-92-3	tert-Butyl Ethyl Ether	ND	94	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	230	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	94	ug/kg	
127-18-4	Tetrachloroethene	ND	94	ug/kg	
109-99-9	Tetrahydrofuran	ND	470	ug/kg	
108-88-3	Toluene	ND	230	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	230	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	230	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	94	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	94	ug/kg	
79-01-6	Trichloroethene	ND	94	ug/kg	
75-69-4	Trichlorofluoromethane	ND	94	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	230	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	230	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	230	ug/kg	
75-01-4	Vinyl chloride	ND	94	ug/kg	
	m,p-Xylene	ND	94	ug/kg	
95-47-6	o-Xylene	ND	94	ug/kg	
1330-20-7	Xylene (total)	ND	94	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA104_0-4'**Lab Sample ID:** M96257-5**Matrix:** SO - Soil**Method:** SW846 8260B**Project:** Former Energy International Parcel, MA**Date Sampled:** 12/01/10**Date Received:** 12/01/10**Percent Solids:** 90.6

VOA MCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		70-130%
2037-26-5	Toluene-D8	112%		70-130%
460-00-4	4-Bromofluorobenzene	112%		70-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA104_0-4'	Date Sampled:	12/01/10
Lab Sample ID:	M96257-5	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	90.6
Method:	SW846 8270C SW846 3510C		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	S19967.D	1	12/13/10	PR	12/06/10	OP23538	MSS826
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.6 g	1.0 ml
Run #2		

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
65-85-0	Benzoic acid	ND	540	ug/kg	
95-57-8	2-Chlorophenol	ND	270	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	540	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	540	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	540	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1100	ug/kg	
95-48-7	2-Methylphenol	ND	540	ug/kg	
	3&4-Methylphenol	ND	540	ug/kg	
88-75-5	2-Nitrophenol	ND	540	ug/kg	
100-02-7	4-Nitrophenol	ND	1100	ug/kg	
87-86-5	Pentachlorophenol	ND	540	ug/kg	
108-95-2	Phenol	ND	270	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	540	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	540	ug/kg	
83-32-9	Acenaphthene	ND	270	ug/kg	
208-96-8	Acenaphthylene	ND	270	ug/kg	
98-86-2	Acetophenone	ND	540	ug/kg	
62-53-3	Aniline	ND	540	ug/kg	
120-12-7	Anthracene	566	270	ug/kg	
56-55-3	Benzo(a)anthracene	1110	270	ug/kg	
50-32-8	Benzo(a)pyrene	1330	270	ug/kg	
205-99-2	Benzo(b)fluoranthene	1430	270	ug/kg	
191-24-2	Benzo(g,h,i)perylene	1370	270	ug/kg	
207-08-9	Benzo(k)fluoranthene	1270	270	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	270	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	270	ug/kg	
91-58-7	2-Chloronaphthalene	ND	270	ug/kg	
106-47-8	4-Chloroaniline	ND	540	ug/kg	
218-01-9	Chrysene	1450	270	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	270	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	270	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	270	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA104_0-4'	Date Sampled:	12/01/10
Lab Sample ID:	M96257-5	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	90.6
Method:	SW846 8270C SW846 3510C		
Project:	Former Energy International Parcel, MA		

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	270	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	270	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	270	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	270	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	540	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	540	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	270	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	458	270	ug/kg	
132-64-9	Dibenzofuran	ND	270	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	270	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	270	ug/kg	
84-66-2	Diethyl phthalate	ND	270	ug/kg	
131-11-3	Dimethyl phthalate	ND	270	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	270	ug/kg	
206-44-0	Fluoranthene	1720	270	ug/kg	
86-73-7	Fluorene	ND	270	ug/kg	
118-74-1	Hexachlorobenzene	ND	270	ug/kg	
87-68-3	Hexachlorobutadiene	ND	270	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	540	ug/kg	
67-72-1	Hexachloroethane	ND	270	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	1310	270	ug/kg	
78-59-1	Isophorone	ND	270	ug/kg	
91-57-6	2-Methylnaphthalene	ND	270	ug/kg	
91-20-3	Naphthalene	ND	270	ug/kg	
98-95-3	Nitrobenzene	ND	270	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	270	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	270	ug/kg	
85-01-8	Phenanthrene	1070	270	ug/kg	
129-00-0	Pyrene	1890	270	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	270	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	62%		30-130%
4165-62-2	Phenol-d5	61%		30-130%
118-79-6	2,4,6-Tribromophenol	74%		30-130%
4165-60-0	Nitrobenzene-d5	62%		30-130%
321-60-8	2-Fluorobiphenyl	72%		30-130%
1718-51-0	Terphenyl-d14	75%		30-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA104_0-4'	Date Sampled:	12/01/10
Lab Sample ID:	M96257-5	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	90.6
Method:	MADEP VPH REV 1.1		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	BH17828.D	1	12/08/10	WS	n/a	n/a	GBH929
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	13.2 g	11.0 ml	100 ul
Run #2			

Volatile TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C5- C8 Aliphatics (Unadj.)	ND	5100	ug/kg	
	C9- C12 Aliphatics (Unadj.)	ND	5100	ug/kg	
	C9- C10 Aromatics (Unadj.)	ND	5100	ug/kg	
	C5- C8 Aliphatics	ND	5100	ug/kg	
	C9- C12 Aliphatics	ND	5100	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	122%		70-130%
615-59-8	2,5-Dibromotoluene	116%		70-130%

(a) Soil to methanol ratio greater than 1.25 to 1.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA104_0-4'	Date Sampled:	12/01/10
Lab Sample ID:	M96257-5	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	90.6
Method:	MADEP EPH REV 1.1 SW846 3545		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BI2748.D	1	12/14/10	JD	12/10/10	OP23590	GBI102
Run #2							

	Initial Weight	Final Volume
Run #1	11.1 g	2.0 ml
Run #2		

Extractable TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C11-C22 Aromatics (Unadj.)	92500	20000	ug/kg	
	C9-C18 Aliphatics	ND	9900	ug/kg	
	C19-C36 Aliphatics	58900	9900	ug/kg	
	C11-C22 Aromatics	69900	20000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	87%		40-140%
321-60-8	2-Fluorobiphenyl	95%		40-140%
580-13-2	2-Bromonaphthalene	82%		40-140%
3386-33-2	1-Chlorooctadecane	41%		40-140%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA104_0-4'

Lab Sample ID: M96257-5

Matrix: SO - Soil

Date Sampled: 12/01/10

Date Received: 12/01/10

Percent Solids: 90.6

Project: Former Energy International Parcel, MA

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analized By	Method	Prep Method
Antimony	< 0.84	0.84	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Arsenic	7.9	0.84	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Barium	91.4	4.2	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Beryllium	0.35	0.34	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Cadmium	< 0.34	0.34	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Chromium	13.1	0.84	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Lead	268	0.84	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Mercury	0.68	0.035	mg/kg	1	12/03/10	12/03/10 PY	SW846 7471A ²	SW846 7471A ⁴
Nickel	12.4	3.4	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Selenium	< 0.84	0.84	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Silver	< 0.42	0.42	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Thallium	< 0.84	0.84	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Vanadium	22.5	0.84	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Zinc	111	1.7	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³

(1) Instrument QC Batch: MA12490

(2) Instrument QC Batch: MA12492

(3) Prep QC Batch: MP16330

(4) Prep QC Batch: MP16331

RL = Reporting Limit

Report of Analysis

Client Sample ID: HA104_0-4'**Lab Sample ID:** M96257-5**Matrix:** SO - Soil**Date Sampled:** 12/01/10**Date Received:** 12/01/10**Percent Solids:** 90.6**Project:** Former Energy International Parcel, MA

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Corrosivity as pH	7.9			1	12/03/10	MA	SW846 CHAP7
Cyanide Reactivity	< 1.7	1.7	mg/kg	1	12/08/10	BF	SW846 CHAP7
Ignitability (Flashpoint)	> 230		Deg. F	1	12/08/10	BF	SW846 1020
Redox Potential Vs H2 ^a	407		mv	1	12/03/10	MC	ASTM D1498-76M
Solids, Percent	90.6		%	1	12/03/10	HS	SM21 2540 B MOD.
Sulfide Reactivity	< 55	55	mg/kg	1	12/08/10	BF	SW846 CHAP7

(a) Analysis requested after recommended holding time.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HA104_0-4'	Date Sampled:	12/01/10
Lab Sample ID:	M96257-5A	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	90.6
Project:	Former Energy International Parcel, MA		

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	0.059	D008	5.0	0.010	mg/l	1	12/07/10	12/07/10 DA	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA12502
(2) Prep QC Batch: MP16339

RL = Reporting Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)

Report of Analysis

Client Sample ID: HA104_8-13.2'**Lab Sample ID:** M96257-6**Date Sampled:** 12/01/10**Matrix:** SO - Soil**Date Received:** 12/01/10**Method:** SW846 8260B**Percent Solids:** 80.1**Project:** Former Energy International Parcel, MA

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R18682.D	1	12/09/10	GK	n/a	n/a	MSR666
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	10.5 g	10.0 ml	100 ul
Run #2			

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	360	ug/kg	
71-43-2	Benzene	ND	36	ug/kg	
108-86-1	Bromobenzene	ND	360	ug/kg	
74-97-5	Bromochloromethane	ND	360	ug/kg	
75-27-4	Bromodichloromethane	ND	140	ug/kg	
75-25-2	Bromoform	ND	140	ug/kg	
74-83-9	Bromomethane	ND	140	ug/kg	
78-93-3	2-Butanone (MEK)	ND	360	ug/kg	
104-51-8	n-Butylbenzene	ND	360	ug/kg	
135-98-8	sec-Butylbenzene	ND	360	ug/kg	
98-06-6	tert-Butylbenzene	ND	360	ug/kg	
75-15-0	Carbon disulfide	ND	360	ug/kg	
56-23-5	Carbon tetrachloride	ND	140	ug/kg	
108-90-7	Chlorobenzene	ND	140	ug/kg	
75-00-3	Chloroethane	ND	360	ug/kg	
67-66-3	Chloroform	ND	140	ug/kg	
74-87-3	Chloromethane	ND	360	ug/kg	
95-49-8	o-Chlorotoluene	ND	360	ug/kg	
106-43-4	p-Chlorotoluene	ND	360	ug/kg	
108-20-3	Di-Isopropyl ether	ND	140	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	360	ug/kg	
124-48-1	Dibromochloromethane	ND	140	ug/kg	
106-93-4	1,2-Dibromoethane	ND	140	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	140	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	140	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	140	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	140	ug/kg	
75-34-3	1,1-Dichloroethane	ND	140	ug/kg	
107-06-2	1,2-Dichloroethane	ND	140	ug/kg	
75-35-4	1,1-Dichloroethene	ND	140	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	140	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	140	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA104_8-13.2'

Lab Sample ID: M96257-6

Date Sampled: 12/01/10

Matrix: SO - Soil

Date Received: 12/01/10

Method: SW846 8260B

Percent Solids: 80.1

Project: Former Energy International Parcel, MA

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
78-87-5	1,2-Dichloropropane	ND	140	ug/kg	
142-28-9	1,3-Dichloropropane	ND	360	ug/kg	
594-20-7	2,2-Dichloropropane	ND	360	ug/kg	
563-58-6	1,1-Dichloropropene	ND	360	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	140	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	140	ug/kg	
123-91-1	1,4-Dioxane	ND	1800	ug/kg	
60-29-7	Ethyl Ether	ND	360	ug/kg	
100-41-4	Ethylbenzene	ND	140	ug/kg	
87-68-3	Hexachlorobutadiene	ND	360	ug/kg	
591-78-6	2-Hexanone	ND	360	ug/kg	
98-82-8	Isopropylbenzene	ND	360	ug/kg	
99-87-6	p-Isopropyltoluene	ND	360	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	140	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	360	ug/kg	
74-95-3	Methylene bromide	ND	360	ug/kg	
75-09-2	Methylene chloride	ND	140	ug/kg	
91-20-3	Naphthalene	2570	360	ug/kg	
103-65-1	n-Propylbenzene	ND	360	ug/kg	
100-42-5	Styrene	ND	360	ug/kg	
994-05-8	tert-Amyl Methyl Ether	ND	360	ug/kg	
637-92-3	tert-Butyl Ethyl Ether	ND	140	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	360	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	140	ug/kg	
127-18-4	Tetrachloroethene	ND	140	ug/kg	
109-99-9	Tetrahydrofuran	ND	720	ug/kg	
108-88-3	Toluene	ND	360	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	360	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	360	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	140	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	140	ug/kg	
79-01-6	Trichloroethene	ND	140	ug/kg	
75-69-4	Trichlorofluoromethane	ND	140	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	360	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	360	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	360	ug/kg	
75-01-4	Vinyl chloride	ND	140	ug/kg	
	m,p-Xylene	ND	140	ug/kg	
95-47-6	o-Xylene	ND	140	ug/kg	
1330-20-7	Xylene (total)	ND	140	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA104_8-13.2'**Lab Sample ID:** M96257-6**Date Sampled:** 12/01/10**Matrix:** SO - Soil**Date Received:** 12/01/10**Method:** SW846 8260B**Percent Solids:** 80.1**Project:** Former Energy International Parcel, MA

VOA MCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		70-130%
2037-26-5	Toluene-D8	111%		70-130%
460-00-4	4-Bromofluorobenzene	113%		70-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA104_8-13.2'	Date Sampled:	12/01/10
Lab Sample ID:	M96257-6	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	80.1
Method:	SW846 8270C SW846 3510C		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	S19968.D	1	12/13/10	PR	12/06/10	OP23538	MSS826
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.1 g	1.0 ml
Run #2		

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
65-85-0	Benzoic acid	ND	620	ug/kg	
95-57-8	2-Chlorophenol	ND	310	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	620	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	620	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	620	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1200	ug/kg	
95-48-7	2-Methylphenol	ND	620	ug/kg	
	3&4-Methylphenol	ND	620	ug/kg	
88-75-5	2-Nitrophenol	ND	620	ug/kg	
100-02-7	4-Nitrophenol	ND	1200	ug/kg	
87-86-5	Pentachlorophenol	ND	620	ug/kg	
108-95-2	Phenol	ND	310	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	620	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	620	ug/kg	
83-32-9	Acenaphthene	992	310	ug/kg	
208-96-8	Acenaphthylene	ND	310	ug/kg	
98-86-2	Acetophenone	ND	620	ug/kg	
62-53-3	Aniline	ND	620	ug/kg	
120-12-7	Anthracene	2120	310	ug/kg	
56-55-3	Benzo(a)anthracene	2620	310	ug/kg	
50-32-8	Benzo(a)pyrene	1900	310	ug/kg	
205-99-2	Benzo(b)fluoranthene	1370	310	ug/kg	
191-24-2	Benzo(g,h,i)perylene	1240	310	ug/kg	
207-08-9	Benzo(k)fluoranthene	1520	310	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	310	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	310	ug/kg	
91-58-7	2-Chloronaphthalene	ND	310	ug/kg	
106-47-8	4-Chloroaniline	ND	620	ug/kg	
218-01-9	Chrysene	2550	310	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	310	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	310	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	310	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA104_8-13.2'**Lab Sample ID:** M96257-6**Date Sampled:** 12/01/10**Matrix:** SO - Soil**Date Received:** 12/01/10**Method:** SW846 8270C SW846 3510C**Percent Solids:** 80.1**Project:** Former Energy International Parcel, MA

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	310	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	310	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	310	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	310	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	620	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	620	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	310	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	464	310	ug/kg	
132-64-9	Dibenzofuran	540	310	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	310	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	310	ug/kg	
84-66-2	Diethyl phthalate	ND	310	ug/kg	
131-11-3	Dimethyl phthalate	ND	310	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	310	ug/kg	
206-44-0	Fluoranthene	4880	310	ug/kg	
86-73-7	Fluorene	1120	310	ug/kg	
118-74-1	Hexachlorobenzene	ND	310	ug/kg	
87-68-3	Hexachlorobutadiene	ND	310	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	620	ug/kg	
67-72-1	Hexachloroethane	ND	310	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	1190	310	ug/kg	
78-59-1	Isophorone	ND	310	ug/kg	
91-57-6	2-Methylnaphthalene	385	310	ug/kg	
91-20-3	Naphthalene	1330	310	ug/kg	
98-95-3	Nitrobenzene	ND	310	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	310	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	310	ug/kg	
85-01-8	Phenanthrene	5120	310	ug/kg	
129-00-0	Pyrene	4560	310	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	310	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	38%		30-130%
4165-62-2	Phenol-d5	37%		30-130%
118-79-6	2,4,6-Tribromophenol	46%		30-130%
4165-60-0	Nitrobenzene-d5	35%		30-130%
321-60-8	2-Fluorobiphenyl	41%		30-130%
1718-51-0	Terphenyl-d14	45%		30-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA104_8-13.2'	Date Sampled:	12/01/10
Lab Sample ID:	M96257-6	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	80.1
Method:	MADEP VPH REV 1.1		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BH17829.D	1	12/08/10	WS	n/a	n/a	GBH929
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	10.5 g	11.0 ml	100 ul
Run #2			

Volatile TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C5- C8 Aliphatics (Unadj.)	ND	7800	ug/kg	
	C9- C12 Aliphatics (Unadj.)	ND	7800	ug/kg	
	C9- C10 Aromatics (Unadj.)	ND	7800	ug/kg	
	C5- C8 Aliphatics	ND	7800	ug/kg	
	C9- C12 Aliphatics	ND	7800	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	126%		70-130%
615-59-8	2,5-Dibromotoluene	119%		70-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA104_8-13.2'		
Lab Sample ID:	M96257-6	Date Sampled:	12/01/10
Matrix:	SO - Soil	Date Received:	12/01/10
Method:	MADEP EPH REV 1.1 SW846 3545	Percent Solids:	80.1
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BI2791.D	1	12/16/10	JD	12/10/10	OP23590	GBI104
Run #2							

	Initial Weight	Final Volume
Run #1	11.1 g	2.0 ml
Run #2		

Extractable TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C11-C22 Aromatics (Unadj.)	292000	22000	ug/kg	
	C9-C18 Aliphatics	23000	11000	ug/kg	
	C19-C36 Aliphatics	83100	11000	ug/kg	
	C11-C22 Aromatics	212000	22000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	122%		40-140%
321-60-8	2-Fluorobiphenyl	93%		40-140%
580-13-2	2-Bromonaphthalene	67%		40-140%
3386-33-2	1-Chlorooctadecane	47%		40-140%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA104_8-13.2'**Lab Sample ID:** M96257-6**Date Sampled:** 12/01/10**Matrix:** SO - Soil**Date Received:** 12/01/10**Percent Solids:** 80.1**Project:** Former Energy International Parcel, MA**Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Antimony	1.2	0.90	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Arsenic	9.5	0.90	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Barium	192	4.5	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Beryllium	0.62	0.36	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Cadmium	< 0.36	0.36	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Chromium	22.6	0.90	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Lead	302	0.90	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Mercury	1.8	0.18	mg/kg	5	12/07/10	12/08/10 PY	SW846 7471A ²	SW846 7471A ⁴
Nickel	17.2	3.6	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Selenium	< 0.90	0.90	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Silver	< 0.45	0.45	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Thallium	< 0.90	0.90	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Vanadium	32.6	0.90	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Zinc	178	1.8	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³

(1) Instrument QC Batch: MA12497

(2) Instrument QC Batch: MA12500

(3) Prep QC Batch: MP16338

(4) Prep QC Batch: MP16345

RL = Reporting Limit

Report of Analysis

Client Sample ID: HA104_8-13.2'**Lab Sample ID:** M96257-6**Matrix:** SO - Soil**Date Sampled:** 12/01/10**Date Received:** 12/01/10**Percent Solids:** 80.1**Project:** Former Energy International Parcel, MA

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Corrosivity as pH	7.8			1	12/03/10	MA	SW846 CHAP7
Cyanide Reactivity	< 1.9	1.9	mg/kg	1	12/08/10	BF	SW846 CHAP7
Ignitability (Flashpoint)	> 230		Deg. F	1	12/08/10	BF	SW846 1020
Redox Potential Vs H2 ^a	371		mv	1	12/03/10	MC	ASTM D1498-76M
Solids, Percent	80.1		%	1	12/03/10	HS	SM21 2540 B MOD.
Sulfide Reactivity	< 62	62	mg/kg	1	12/08/10	BF	SW846 CHAP7

(a) Analysis requested after recommended holding time.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HA104_8-13.2'	Date Sampled:	12/01/10
Lab Sample ID:	M96257-6A	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	80.1
Project:	Former Energy International Parcel, MA		

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	0.74	D008	5.0	0.010	mg/l	1	12/07/10	12/07/10 DA	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA12502
(2) Prep QC Batch: MP16339

RL = Reporting Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)

Report of Analysis

Client Sample ID:	HA103_0-4'	Date Sampled:	12/01/10
Lab Sample ID:	M96257-7	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	90.6
Method:	SW846 8260B		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R18629.D	1	12/07/10	GK	n/a	n/a	MSR663
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	11.8 g	10.0 ml	100 ul
Run #2			

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	260	ug/kg	
71-43-2	Benzene	36.0	26	ug/kg	
108-86-1	Bromobenzene	ND	260	ug/kg	
74-97-5	Bromochloromethane	ND	260	ug/kg	
75-27-4	Bromodichloromethane	ND	100	ug/kg	
75-25-2	Bromoform	ND	100	ug/kg	
74-83-9	Bromomethane	ND	100	ug/kg	
78-93-3	2-Butanone (MEK)	ND	260	ug/kg	
104-51-8	n-Butylbenzene	ND	260	ug/kg	
135-98-8	sec-Butylbenzene	ND	260	ug/kg	
98-06-6	tert-Butylbenzene	ND	260	ug/kg	
75-15-0	Carbon disulfide	ND	260	ug/kg	
56-23-5	Carbon tetrachloride	ND	100	ug/kg	
108-90-7	Chlorobenzene	ND	100	ug/kg	
75-00-3	Chloroethane	ND	260	ug/kg	
67-66-3	Chloroform	ND	100	ug/kg	
74-87-3	Chloromethane	ND	260	ug/kg	
95-49-8	o-Chlorotoluene	ND	260	ug/kg	
106-43-4	p-Chlorotoluene	ND	260	ug/kg	
108-20-3	Di-Isopropyl ether	ND	100	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	260	ug/kg	
124-48-1	Dibromochloromethane	ND	100	ug/kg	
106-93-4	1,2-Dibromoethane	ND	100	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	100	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	100	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	100	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	100	ug/kg	
75-34-3	1,1-Dichloroethane	ND	100	ug/kg	
107-06-2	1,2-Dichloroethane	ND	100	ug/kg	
75-35-4	1,1-Dichloroethene	ND	100	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	100	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	100	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA103_0-4'	Date Sampled:	12/01/10
Lab Sample ID:	M96257-7	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	90.6
Method:	SW846 8260B		
Project:	Former Energy International Parcel, MA		

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
78-87-5	1,2-Dichloropropane	ND	100	ug/kg	
142-28-9	1,3-Dichloropropane	ND	260	ug/kg	
594-20-7	2,2-Dichloropropane	ND	260	ug/kg	
563-58-6	1,1-Dichloropropene	ND	260	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	100	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	100	ug/kg	
123-91-1	1,4-Dioxane	ND	1300	ug/kg	
60-29-7	Ethyl Ether	ND	260	ug/kg	
100-41-4	Ethylbenzene	ND	100	ug/kg	
87-68-3	Hexachlorobutadiene	ND	260	ug/kg	
591-78-6	2-Hexanone	ND	260	ug/kg	
98-82-8	Isopropylbenzene	ND	260	ug/kg	
99-87-6	p-Isopropyltoluene	ND	260	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	100	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	260	ug/kg	
74-95-3	Methylene bromide	ND	260	ug/kg	
75-09-2	Methylene chloride	ND	100	ug/kg	
91-20-3	Naphthalene	267	260	ug/kg	
103-65-1	n-Propylbenzene	ND	260	ug/kg	
100-42-5	Styrene	ND	260	ug/kg	
994-05-8	tert-Amyl Methyl Ether	ND	260	ug/kg	
637-92-3	tert-Butyl Ethyl Ether	ND	100	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	260	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	100	ug/kg	
127-18-4	Tetrachloroethene	ND	100	ug/kg	
109-99-9	Tetrahydrofuran	ND	520	ug/kg	
108-88-3	Toluene	ND	260	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	260	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	260	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	100	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	100	ug/kg	
79-01-6	Trichloroethene	ND	100	ug/kg	
75-69-4	Trichlorofluoromethane	ND	100	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	260	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	260	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	260	ug/kg	
75-01-4	Vinyl chloride	ND	100	ug/kg	
	m,p-Xylene	114	100	ug/kg	
95-47-6	o-Xylene	ND	100	ug/kg	
1330-20-7	Xylene (total)	179	100	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA103_0-4'**Lab Sample ID:** M96257-7**Matrix:** SO - Soil**Method:** SW846 8260B**Project:** Former Energy International Parcel, MA**Date Sampled:** 12/01/10**Date Received:** 12/01/10**Percent Solids:** 90.6

VOA MCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	112%		70-130%
2037-26-5	Toluene-D8	113%		70-130%
460-00-4	4-Bromofluorobenzene	110%		70-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA103_0-4'	Date Sampled:	12/01/10
Lab Sample ID:	M96257-7	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	90.6
Method:	SW846 8270C SW846 3510C		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	S19969.D	1	12/13/10	PR	12/06/10	OP23538	MSS826
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.3 g	1.0 ml
Run #2		

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
65-85-0	Benzoic acid	ND	550	ug/kg	
95-57-8	2-Chlorophenol	ND	270	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	550	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	550	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	550	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1100	ug/kg	
95-48-7	2-Methylphenol	ND	550	ug/kg	
	3&4-Methylphenol	ND	550	ug/kg	
88-75-5	2-Nitrophenol	ND	550	ug/kg	
100-02-7	4-Nitrophenol	ND	1100	ug/kg	
87-86-5	Pentachlorophenol	ND	550	ug/kg	
108-95-2	Phenol	ND	270	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	550	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	550	ug/kg	
83-32-9	Acenaphthene	ND	270	ug/kg	
208-96-8	Acenaphthylene	ND	270	ug/kg	
98-86-2	Acetophenone	ND	550	ug/kg	
62-53-3	Aniline	ND	550	ug/kg	
120-12-7	Anthracene	641	270	ug/kg	
56-55-3	Benzo(a)anthracene	1470	270	ug/kg	
50-32-8	Benzo(a)pyrene	1270	270	ug/kg	
205-99-2	Benzo(b)fluoranthene	1330	270	ug/kg	
191-24-2	Benzo(g,h,i)perylene	903	270	ug/kg	
207-08-9	Benzo(k)fluoranthene	1020	270	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	270	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	270	ug/kg	
91-58-7	2-Chloronaphthalene	ND	270	ug/kg	
106-47-8	4-Chloroaniline	ND	550	ug/kg	
218-01-9	Chrysene	1520	270	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	270	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	270	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	270	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA103_0-4'	Date Sampled:	12/01/10
Lab Sample ID:	M96257-7	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	90.6
Method:	SW846 8270C SW846 3510C		
Project:	Former Energy International Parcel, MA		

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	270	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	270	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	270	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	270	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	550	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	550	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	270	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	347	270	ug/kg	
132-64-9	Dibenzofuran	ND	270	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	270	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	270	ug/kg	
84-66-2	Diethyl phthalate	ND	270	ug/kg	
131-11-3	Dimethyl phthalate	ND	270	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	270	ug/kg	
206-44-0	Fluoranthene	2550	270	ug/kg	
86-73-7	Fluorene	ND	270	ug/kg	
118-74-1	Hexachlorobenzene	ND	270	ug/kg	
87-68-3	Hexachlorobutadiene	ND	270	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	550	ug/kg	
67-72-1	Hexachloroethane	ND	270	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	934	270	ug/kg	
78-59-1	Isophorone	ND	270	ug/kg	
91-57-6	2-Methylnaphthalene	372	270	ug/kg	
91-20-3	Naphthalene	398	270	ug/kg	
98-95-3	Nitrobenzene	ND	270	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	270	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	270	ug/kg	
85-01-8	Phenanthrene	2000	270	ug/kg	
129-00-0	Pyrene	2370	270	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	270	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	60%		30-130%
4165-62-2	Phenol-d5	59%		30-130%
118-79-6	2,4,6-Tribromophenol	70%		30-130%
4165-60-0	Nitrobenzene-d5	60%		30-130%
321-60-8	2-Fluorobiphenyl	68%		30-130%
1718-51-0	Terphenyl-d14	65%		30-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA103_0-4'	Date Sampled:	12/01/10
Lab Sample ID:	M96257-7	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	90.6
Method:	MADEP VPH REV 1.1		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BH17830.D	1	12/08/10	WS	n/a	n/a	GBH929
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	11.8 g	11.0 ml	100 ul
Run #2			

Volatile TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C5- C8 Aliphatics (Unadj.)	ND	5700	ug/kg	
	C9- C12 Aliphatics (Unadj.)	ND	5700	ug/kg	
	C9- C10 Aromatics (Unadj.)	ND	5700	ug/kg	
	C5- C8 Aliphatics	ND	5700	ug/kg	
	C9- C12 Aliphatics	ND	5700	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	107%		70-130%
615-59-8	2,5-Dibromotoluene	100%		70-130%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA103_0-4'	Date Sampled:	12/01/10
Lab Sample ID:	M96257-7	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	90.6
Method:	MADEP EPH REV 1.1 SW846 3545		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BI2780.D	1	12/15/10	JD	12/10/10	OP23590	GBI104
Run #2							

Run #	Initial Weight	Final Volume
Run #1	11.8 g	2.0 ml
Run #2		

Extractable TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C11-C22 Aromatics (Unadj.)	167000	19000	ug/kg	
	C9-C18 Aliphatics	14800	9400	ug/kg	
	C19-C36 Aliphatics	85500	9400	ug/kg	
	C11-C22 Aromatics	138000	19000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	101%		40-140%
321-60-8	2-Fluorobiphenyl	92%		40-140%
580-13-2	2-Bromonaphthalene	62%		40-140%
3386-33-2	1-Chlorooctadecane	29% ^a		40-140%

(a) Outside control limits due to possible matrix interference. Confirmed by reanalysis.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA103_0-4'

Lab Sample ID: M96257-7

Matrix: SO - Soil

Date Sampled: 12/01/10

Date Received: 12/01/10

Percent Solids: 90.6

Project: Former Energy International Parcel, MA

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analized By	Method	Prep Method
Antimony	1.4	0.82	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Arsenic	7.8	0.82	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Barium	57.9	4.1	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Beryllium	0.37	0.33	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Cadmium	0.57	0.33	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Chromium	14.1	0.82	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Lead	175	0.82	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Mercury	0.36	0.033	mg/kg	1	12/03/10	12/03/10 PY	SW846 7471A ²	SW846 7471A ⁴
Nickel	14.4	3.3	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Selenium	< 0.82	0.82	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Silver	< 0.41	0.41	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Thallium	< 0.82	0.82	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Vanadium	24.3	0.82	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Zinc	107	1.6	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³

(1) Instrument QC Batch: MA12490

(2) Instrument QC Batch: MA12492

(3) Prep QC Batch: MP16330

(4) Prep QC Batch: MP16331

RL = Reporting Limit

Report of Analysis

Client Sample ID: HA103_0-4'**Lab Sample ID:** M96257-7**Matrix:** SO - Soil**Date Sampled:** 12/01/10**Date Received:** 12/01/10**Percent Solids:** 90.6**Project:** Former Energy International Parcel, MA

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Corrosivity as pH	8.6			1	12/03/10	MA	SW846 CHAP7
Cyanide Reactivity	< 1.7	1.7	mg/kg	1	12/08/10	BF	SW846 CHAP7
Ignitability (Flashpoint)	> 230		Deg. F	1	12/08/10	BF	SW846 1020
Redox Potential Vs H2 ^a	402		mv	1	12/03/10	MC	ASTM D1498-76M
Solids, Percent	90.6		%	1	12/03/10	HS	SM21 2540 B MOD.
Sulfide Reactivity	< 55	55	mg/kg	1	12/08/10	BF	SW846 CHAP7

(a) Analysis requested after recommended holding time.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HA103_0-4'		
Lab Sample ID:	M96257-7A	Date Sampled:	12/01/10
Matrix:	SO - Soil	Date Received:	12/01/10
		Percent Solids:	90.6
Project:	Former Energy International Parcel, MA		

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	0.043	D008	5.0	0.010	mg/l	1	12/07/10	12/07/10 DA	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA12502
(2) Prep QC Batch: MP16339

RL = Reporting Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)

Report of Analysis

Client Sample ID:	HA103_4-8'	Date Sampled:	12/01/10
Lab Sample ID:	M96257-8	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	81.7
Method:	SW846 8260B		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R18676.D	1	12/09/10	GK	n/a	n/a	MSR666
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	9.16 g	10.0 ml	100 ul
Run #2			

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	390	ug/kg	
71-43-2	Benzene	80.8	39	ug/kg	
108-86-1	Bromobenzene	ND	390	ug/kg	
74-97-5	Bromochloromethane	ND	390	ug/kg	
75-27-4	Bromodichloromethane	ND	160	ug/kg	
75-25-2	Bromoform	ND	160	ug/kg	
74-83-9	Bromomethane	ND	160	ug/kg	
78-93-3	2-Butanone (MEK)	ND	390	ug/kg	
104-51-8	n-Butylbenzene	ND	390	ug/kg	
135-98-8	sec-Butylbenzene	ND	390	ug/kg	
98-06-6	tert-Butylbenzene	ND	390	ug/kg	
75-15-0	Carbon disulfide	ND	390	ug/kg	
56-23-5	Carbon tetrachloride	ND	160	ug/kg	
108-90-7	Chlorobenzene	ND	160	ug/kg	
75-00-3	Chloroethane	ND	390	ug/kg	
67-66-3	Chloroform	ND	160	ug/kg	
74-87-3	Chloromethane	ND	390	ug/kg	
95-49-8	o-Chlorotoluene	ND	390	ug/kg	
106-43-4	p-Chlorotoluene	ND	390	ug/kg	
108-20-3	Di-Isopropyl ether	ND	160	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	390	ug/kg	
124-48-1	Dibromochloromethane	ND	160	ug/kg	
106-93-4	1,2-Dibromoethane	ND	160	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	160	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	160	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	160	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	160	ug/kg	
75-34-3	1,1-Dichloroethane	ND	160	ug/kg	
107-06-2	1,2-Dichloroethane	ND	160	ug/kg	
75-35-4	1,1-Dichloroethene	ND	160	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	160	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	160	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA103_4-8'	Date Sampled:	12/01/10
Lab Sample ID:	M96257-8	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	81.7
Method:	SW846 8260B		
Project:	Former Energy International Parcel, MA		

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
78-87-5	1,2-Dichloropropane	ND	160	ug/kg	
142-28-9	1,3-Dichloropropane	ND	390	ug/kg	
594-20-7	2,2-Dichloropropane	ND	390	ug/kg	
563-58-6	1,1-Dichloropropene	ND	390	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	160	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	160	ug/kg	
123-91-1	1,4-Dioxane	ND	2000	ug/kg	
60-29-7	Ethyl Ether	ND	390	ug/kg	
100-41-4	Ethylbenzene	ND	160	ug/kg	
87-68-3	Hexachlorobutadiene	ND	390	ug/kg	
591-78-6	2-Hexanone	ND	390	ug/kg	
98-82-8	Isopropylbenzene	ND	390	ug/kg	
99-87-6	p-Isopropyltoluene	ND	390	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	160	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	390	ug/kg	
74-95-3	Methylene bromide	ND	390	ug/kg	
75-09-2	Methylene chloride	ND	160	ug/kg	
91-20-3	Naphthalene	557	390	ug/kg	
103-65-1	n-Propylbenzene	ND	390	ug/kg	
100-42-5	Styrene	ND	390	ug/kg	
994-05-8	tert-Amyl Methyl Ether	ND	390	ug/kg	
637-92-3	tert-Butyl Ethyl Ether	ND	160	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	390	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	160	ug/kg	
127-18-4	Tetrachloroethene	ND	160	ug/kg	
109-99-9	Tetrahydrofuran	ND	780	ug/kg	
108-88-3	Toluene	ND	390	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	390	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	390	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	160	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	160	ug/kg	
79-01-6	Trichloroethene	ND	160	ug/kg	
75-69-4	Trichlorofluoromethane	ND	160	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	390	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	390	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	390	ug/kg	
75-01-4	Vinyl chloride	ND	160	ug/kg	
	m,p-Xylene	231	160	ug/kg	
95-47-6	o-Xylene	ND	160	ug/kg	
1330-20-7	Xylene (total)	360	160	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA103_4-8'**Lab Sample ID:** M96257-8**Date Sampled:** 12/01/10**Matrix:** SO - Soil**Date Received:** 12/01/10**Method:** SW846 8260B**Percent Solids:** 81.7**Project:** Former Energy International Parcel, MA

VOA MCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		70-130%
2037-26-5	Toluene-D8	108%		70-130%
460-00-4	4-Bromofluorobenzene	107%		70-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA103_4-8'	Date Sampled:	12/01/10
Lab Sample ID:	M96257-8	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	81.7
Method:	SW846 8270C SW846 3510C		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	S19970.D	1	12/13/10	PR	12/06/10	OP23538	MSS826
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.1 g	1.0 ml
Run #2		

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
65-85-0	Benzoic acid	ND	610	ug/kg	
95-57-8	2-Chlorophenol	ND	300	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	610	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	610	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	610	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1200	ug/kg	
95-48-7	2-Methylphenol	ND	610	ug/kg	
	3&4-Methylphenol	ND	610	ug/kg	
88-75-5	2-Nitrophenol	ND	610	ug/kg	
100-02-7	4-Nitrophenol	ND	1200	ug/kg	
87-86-5	Pentachlorophenol	ND	610	ug/kg	
108-95-2	Phenol	ND	300	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	610	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	610	ug/kg	
83-32-9	Acenaphthene	383	300	ug/kg	
208-96-8	Acenaphthylene	564	300	ug/kg	
98-86-2	Acetophenone	ND	610	ug/kg	
62-53-3	Aniline	ND	610	ug/kg	
120-12-7	Anthracene	1300	300	ug/kg	
56-55-3	Benzo(a)anthracene	2810	300	ug/kg	
50-32-8	Benzo(a)pyrene	2190	300	ug/kg	
205-99-2	Benzo(b)fluoranthene	2080	300	ug/kg	
191-24-2	Benzo(g,h,i)perylene	1440	300	ug/kg	
207-08-9	Benzo(k)fluoranthene	1950	300	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	300	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	300	ug/kg	
91-58-7	2-Chloronaphthalene	ND	300	ug/kg	
106-47-8	4-Chloroaniline	ND	610	ug/kg	
218-01-9	Chrysene	2960	300	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	300	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	300	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	300	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA103_4-8'	Date Sampled:	12/01/10
Lab Sample ID:	M96257-8	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	81.7
Method:	SW846 8270C SW846 3510C		
Project:	Former Energy International Parcel, MA		

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	300	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	300	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	300	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	300	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	610	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	610	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	300	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	595	300	ug/kg	
132-64-9	Dibenzofuran	494	300	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	300	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	300	ug/kg	
84-66-2	Diethyl phthalate	ND	300	ug/kg	
131-11-3	Dimethyl phthalate	ND	300	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	300	ug/kg	
206-44-0	Fluoranthene	4700	300	ug/kg	
86-73-7	Fluorene	435	300	ug/kg	
118-74-1	Hexachlorobenzene	ND	300	ug/kg	
87-68-3	Hexachlorobutadiene	ND	300	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	610	ug/kg	
67-72-1	Hexachloroethane	ND	300	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	1520	300	ug/kg	
78-59-1	Isophorone	ND	300	ug/kg	
91-57-6	2-Methylnaphthalene	881	300	ug/kg	
91-20-3	Naphthalene	861	300	ug/kg	
98-95-3	Nitrobenzene	ND	300	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	300	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	300	ug/kg	
85-01-8	Phenanthrene	3720	300	ug/kg	
129-00-0	Pyrene	4230	300	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	300	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	64%		30-130%
4165-62-2	Phenol-d5	63%		30-130%
118-79-6	2,4,6-Tribromophenol	81%		30-130%
4165-60-0	Nitrobenzene-d5	67%		30-130%
321-60-8	2-Fluorobiphenyl	77%		30-130%
1718-51-0	Terphenyl-d14	73%		30-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA103_4-8'	Date Sampled:	12/01/10
Lab Sample ID:	M96257-8	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	81.7
Method:	MADEP VPH REV 1.1		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BH17831.D	1	12/08/10	WS	n/a	n/a	GBH929
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	9.16 g	11.0 ml	100 ul
Run #2			

Volatile TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C5- C8 Aliphatics (Unadj.)	ND	8500	ug/kg	
	C9- C12 Aliphatics (Unadj.)	12600	8500	ug/kg	
	C9- C10 Aromatics (Unadj.)	ND	8500	ug/kg	
	C5- C8 Aliphatics	ND	8500	ug/kg	
	C9- C12 Aliphatics	ND	8500	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	109%		70-130%
615-59-8	2,5-Dibromotoluene	96%		70-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA103_4-8'	Date Sampled:	12/01/10
Lab Sample ID:	M96257-8	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	81.7
Method:	MADEP EPH REV 1.1 SW846 3545		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BI2744.D	1	12/14/10	JD	12/10/10	OP23590	GBI102
Run #2							

	Initial Weight	Final Volume
Run #1	11.4 g	2.0 ml
Run #2		

Extractable TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C11-C22 Aromatics (Unadj.)	318000	21000	ug/kg	
	C9-C18 Aliphatics	27500	11000	ug/kg	
	C19-C36 Aliphatics	112000	11000	ug/kg	
	C11-C22 Aromatics	257000	21000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	107%		40-140%
321-60-8	2-Fluorobiphenyl	86%		40-140%
580-13-2	2-Bromonaphthalene	59%		40-140%
3386-33-2	1-Chlorooctadecane	37% ^a		40-140%

(a) Outside control limits due to possible matrix interference. Confirmed by refractionation.

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA103_4-8'

Lab Sample ID: M96257-8

Matrix: SO - Soil

Date Sampled: 12/01/10

Date Received: 12/01/10

Percent Solids: 81.7

Project: Former Energy International Parcel, MA

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analized By	Method	Prep Method
Antimony	3.0	0.93	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Arsenic	13.1	0.93	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Barium	120	4.6	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Beryllium	0.41	0.37	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Cadmium	0.96	0.37	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Chromium	19.8	0.93	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Lead	284	0.93	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Mercury	0.77	0.038	mg/kg	1	12/03/10	12/03/10 PY	SW846 7471A ²	SW846 7471A ⁴
Nickel	18.6	3.7	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Selenium	1.1	0.93	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Silver	< 0.46	0.46	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Thallium	< 0.93	0.93	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Vanadium	24.3	0.93	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³
Zinc	205	1.9	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ³

(1) Instrument QC Batch: MA12490

(2) Instrument QC Batch: MA12492

(3) Prep QC Batch: MP16330

(4) Prep QC Batch: MP16331

RL = Reporting Limit

Report of Analysis

Client Sample ID: HA103_4-8'**Lab Sample ID:** M96257-8**Matrix:** SO - Soil**Date Sampled:** 12/01/10**Date Received:** 12/01/10**Percent Solids:** 81.7**Project:** Former Energy International Parcel, MA

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Corrosivity as pH	7.4			1	12/03/10	MA	SW846 CHAP7
Cyanide Reactivity	< 1.8	1.8	mg/kg	1	12/08/10	BF	SW846 CHAP7
Ignitability (Flashpoint)	> 230		Deg. F	1	12/08/10	BF	SW846 1020
Redox Potential Vs H2 ^a	413		mv	1	12/03/10	MC	ASTM D1498-76M
Solids, Percent	81.7		%	1	12/03/10	HS	SM21 2540 B MOD.
Sulfide Reactivity	< 61	61	mg/kg	1	12/08/10	BF	SW846 CHAP7

(a) Analysis requested after recommended holding time.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HA103_4-8'	Date Sampled:	12/01/10
Lab Sample ID:	M96257-8A	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	81.7
Project:	Former Energy International Parcel, MA		

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	0.082	D008	5.0	0.010	mg/l	1	12/07/10	12/07/10 DA	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA12502
(2) Prep QC Batch: MP16339

RL = Reporting Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)

Report of Analysis

Client Sample ID:	HA103_8-12'	Date Sampled:	12/01/10
Lab Sample ID:	M96257-9	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	83.0
Method:	SW846 8260B		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R18677.D	1	12/09/10	GK	n/a	n/a	MSR666
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	13.7 g	10.0 ml	100 ul
Run #2			

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	270	ug/kg	
71-43-2	Benzene	ND	27	ug/kg	
108-86-1	Bromobenzene	ND	270	ug/kg	
74-97-5	Bromochloromethane	ND	270	ug/kg	
75-27-4	Bromodichloromethane	ND	110	ug/kg	
75-25-2	Bromoform	ND	110	ug/kg	
74-83-9	Bromomethane	ND	110	ug/kg	
78-93-3	2-Butanone (MEK)	ND	270	ug/kg	
104-51-8	n-Butylbenzene	ND	270	ug/kg	
135-98-8	sec-Butylbenzene	ND	270	ug/kg	
98-06-6	tert-Butylbenzene	ND	270	ug/kg	
75-15-0	Carbon disulfide	ND	270	ug/kg	
56-23-5	Carbon tetrachloride	ND	110	ug/kg	
108-90-7	Chlorobenzene	ND	110	ug/kg	
75-00-3	Chloroethane	ND	270	ug/kg	
67-66-3	Chloroform	ND	110	ug/kg	
74-87-3	Chloromethane	ND	270	ug/kg	
95-49-8	o-Chlorotoluene	ND	270	ug/kg	
106-43-4	p-Chlorotoluene	ND	270	ug/kg	
108-20-3	Di-Isopropyl ether	ND	110	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	270	ug/kg	
124-48-1	Dibromochloromethane	ND	110	ug/kg	
106-93-4	1,2-Dibromoethane	ND	110	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	110	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	110	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	110	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	110	ug/kg	
75-34-3	1,1-Dichloroethane	ND	110	ug/kg	
107-06-2	1,2-Dichloroethane	ND	110	ug/kg	
75-35-4	1,1-Dichloroethene	ND	110	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	110	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	110	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA103_8-12'	Date Sampled:	12/01/10
Lab Sample ID:	M96257-9	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	83.0
Method:	SW846 8260B		
Project:	Former Energy International Parcel, MA		

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
78-87-5	1,2-Dichloropropane	ND	110	ug/kg	
142-28-9	1,3-Dichloropropane	ND	270	ug/kg	
594-20-7	2,2-Dichloropropane	ND	270	ug/kg	
563-58-6	1,1-Dichloropropene	ND	270	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	110	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	110	ug/kg	
123-91-1	1,4-Dioxane	ND	1400	ug/kg	
60-29-7	Ethyl Ether	ND	270	ug/kg	
100-41-4	Ethylbenzene	ND	110	ug/kg	
87-68-3	Hexachlorobutadiene	ND	270	ug/kg	
591-78-6	2-Hexanone	ND	270	ug/kg	
98-82-8	Isopropylbenzene	ND	270	ug/kg	
99-87-6	p-Isopropyltoluene	ND	270	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	110	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	270	ug/kg	
74-95-3	Methylene bromide	ND	270	ug/kg	
75-09-2	Methylene chloride	ND	110	ug/kg	
91-20-3	Naphthalene	738	270	ug/kg	
103-65-1	n-Propylbenzene	ND	270	ug/kg	
100-42-5	Styrene	ND	270	ug/kg	
994-05-8	tert-Amyl Methyl Ether	ND	270	ug/kg	
637-92-3	tert-Butyl Ethyl Ether	ND	110	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	270	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	110	ug/kg	
127-18-4	Tetrachloroethene	ND	110	ug/kg	
109-99-9	Tetrahydrofuran	ND	540	ug/kg	
108-88-3	Toluene	ND	270	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	270	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	270	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	110	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	110	ug/kg	
79-01-6	Trichloroethene	ND	110	ug/kg	
75-69-4	Trichlorofluoromethane	ND	110	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	270	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	270	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	270	ug/kg	
75-01-4	Vinyl chloride	ND	110	ug/kg	
	m,p-Xylene	ND	110	ug/kg	
95-47-6	o-Xylene	ND	110	ug/kg	
1330-20-7	Xylene (total)	ND	110	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA103_8-12'**Lab Sample ID:** M96257-9**Matrix:** SO - Soil**Method:** SW846 8260B**Project:** Former Energy International Parcel, MA**Date Sampled:** 12/01/10**Date Received:** 12/01/10**Percent Solids:** 83.0

VOA MCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		70-130%
2037-26-5	Toluene-D8	112%		70-130%
460-00-4	4-Bromofluorobenzene	109%		70-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA103_8-12'	Date Sampled:	12/01/10
Lab Sample ID:	M96257-9	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	83.0
Method:	SW846 8270C SW846 3510C		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	S19971.D	10	12/13/10	PR	12/06/10	OP23538	MSS826
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.5 g	1.0 ml
Run #2		

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
65-85-0	Benzoic acid	ND	5900	ug/kg	
95-57-8	2-Chlorophenol	ND	2900	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	5900	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	5900	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	5900	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	12000	ug/kg	
95-48-7	2-Methylphenol	ND	5900	ug/kg	
	3&4-Methylphenol	ND	5900	ug/kg	
88-75-5	2-Nitrophenol	ND	5900	ug/kg	
100-02-7	4-Nitrophenol	ND	12000	ug/kg	
87-86-5	Pentachlorophenol	ND	5900	ug/kg	
108-95-2	Phenol	ND	2900	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	5900	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	5900	ug/kg	
83-32-9	Acenaphthene	ND	2900	ug/kg	
208-96-8	Acenaphthylene	ND	2900	ug/kg	
98-86-2	Acetophenone	ND	5900	ug/kg	
62-53-3	Aniline	ND	5900	ug/kg	
120-12-7	Anthracene	ND	2900	ug/kg	
56-55-3	Benzo(a)anthracene	4110	2900	ug/kg	
50-32-8	Benzo(a)pyrene	3210	2900	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	2900	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	2900	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	2900	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	2900	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	2900	ug/kg	
91-58-7	2-Chloronaphthalene	ND	2900	ug/kg	
106-47-8	4-Chloroaniline	ND	5900	ug/kg	
218-01-9	Chrysene	4080	2900	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	2900	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	2900	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2900	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA103_8-12'	Date Sampled:	12/01/10
Lab Sample ID:	M96257-9	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	83.0
Method:	SW846 8270C SW846 3510C		
Project:	Former Energy International Parcel, MA		

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	2900	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	2900	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	2900	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	2900	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	5900	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	5900	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	2900	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	2900	ug/kg	
132-64-9	Dibenzofuran	ND	2900	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	2900	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	2900	ug/kg	
84-66-2	Diethyl phthalate	ND	2900	ug/kg	
131-11-3	Dimethyl phthalate	ND	2900	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2900	ug/kg	
206-44-0	Fluoranthene	7980	2900	ug/kg	
86-73-7	Fluorene	ND	2900	ug/kg	
118-74-1	Hexachlorobenzene	ND	2900	ug/kg	
87-68-3	Hexachlorobutadiene	ND	2900	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	5900	ug/kg	
67-72-1	Hexachloroethane	ND	2900	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	2900	ug/kg	
78-59-1	Isophorone	ND	2900	ug/kg	
91-57-6	2-Methylnaphthalene	ND	2900	ug/kg	
91-20-3	Naphthalene	ND	2900	ug/kg	
98-95-3	Nitrobenzene	ND	2900	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	2900	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	2900	ug/kg	
85-01-8	Phenanthrene	7650	2900	ug/kg	
129-00-0	Pyrene	6720	2900	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	2900	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	66%		30-130%
4165-62-2	Phenol-d5	61%		30-130%
118-79-6	2,4,6-Tribromophenol	70%		30-130%
4165-60-0	Nitrobenzene-d5	63%		30-130%
321-60-8	2-Fluorobiphenyl	81%		30-130%
1718-51-0	Terphenyl-d14	78%		30-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA103_8-12'	Date Sampled:	12/01/10
Lab Sample ID:	M96257-9	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	83.0
Method:	MADEP VPH REV 1.1		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	BH17832.D	1	12/08/10	WS	n/a	n/a	GBH929
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	13.7 g	11.0 ml	100 ul
Run #2			

Volatile TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C5- C8 Aliphatics (Unadj.)	ND	5900	ug/kg	
	C9- C12 Aliphatics (Unadj.)	33200	5900	ug/kg	
	C9- C10 Aromatics (Unadj.)	19300	5900	ug/kg	
	C5- C8 Aliphatics	ND	5900	ug/kg	
	C9- C12 Aliphatics	13900	5900	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	128%		70-130%
615-59-8	2,5-Dibromotoluene	124%		70-130%

(a) Soil to methanol ratio greater than 1.25 to 1.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA103_8-12'	Date Sampled:	12/01/10
Lab Sample ID:	M96257-9	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	83.0
Method:	MADEP EPH REV 1.1 SW846 3545		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BI2737.D	1	12/14/10	JD	12/10/10	OP23590	GBI102
Run #2							

	Initial Weight	Final Volume
Run #1	11.2 g	2.0 ml
Run #2		

Extractable TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C11-C22 Aromatics (Unadj.)	275000	21000	ug/kg	
	C9-C18 Aliphatics	98200	11000	ug/kg	
	C19-C36 Aliphatics	117000	11000	ug/kg	
	C11-C22 Aromatics	217000	21000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	122%		40-140%
321-60-8	2-Fluorobiphenyl	91%		40-140%
580-13-2	2-Bromonaphthalene	64%		40-140%
3386-33-2	1-Chlorooctadecane	41%		40-140%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA103_8-12'**Lab Sample ID:** M96257-9**Date Sampled:** 12/01/10**Matrix:** SO - Soil**Date Received:** 12/01/10**Percent Solids:** 83.0**Project:** Former Energy International Parcel, MA**Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Antimony ^a	< 4.3	4.3	mg/kg	5	12/02/10	12/03/10 DA	SW846 6010C ³	SW846 3050B ⁴
Arsenic	20.8	0.87	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ⁴
Barium	136	4.3	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ⁴
Beryllium	0.35	0.35	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ⁴
Cadmium	0.66	0.35	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ⁴
Chromium	15.2	0.87	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ⁴
Lead	411	0.87	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ⁴
Mercury	2.7	0.18	mg/kg	5	12/03/10	12/03/10 PY	SW846 7471A ²	SW846 7471A ⁵
Nickel	26.3	3.5	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ⁴
Selenium	0.97	0.87	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ⁴
Silver	< 0.43	0.43	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ⁴
Thallium	< 0.87	0.87	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ⁴
Vanadium	22.3	0.87	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ⁴
Zinc	266	1.7	mg/kg	1	12/02/10	12/02/10 DA	SW846 6010C ¹	SW846 3050B ⁴

(1) Instrument QC Batch: MA12490

(2) Instrument QC Batch: MA12492

(3) Instrument QC Batch: MA12493

(4) Prep QC Batch: MP16330

(5) Prep QC Batch: MP16331

(a) Elevated RL due to dilution required for matrix interference.

RL = Reporting Limit

Report of Analysis

Client Sample ID: HA103_8-12'**Lab Sample ID:** M96257-9**Matrix:** SO - Soil**Date Sampled:** 12/01/10**Date Received:** 12/01/10**Percent Solids:** 83.0**Project:** Former Energy International Parcel, MA

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Corrosivity as pH	7.5			1	12/03/10	MA	SW846 CHAP7
Cyanide Reactivity	< 1.8	1.8	mg/kg	1	12/08/10	BF	SW846 CHAP7
Ignitability (Flashpoint)	> 230		Deg. F	1	12/08/10	BF	SW846 1020
Redox Potential Vs H2 ^a	394		mv	1	12/03/10	MC	ASTM D1498-76M
Solids, Percent	83		%	1	12/03/10	HS	SM21 2540 B MOD.
Sulfide Reactivity	< 60	60	mg/kg	1	12/08/10	BF	SW846 CHAP7

(a) Analysis requested after recommended holding time.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HA103_8-12'	Date Sampled:	12/01/10
Lab Sample ID:	M96257-9A	Date Received:	12/01/10
Matrix:	SO - Soil	Percent Solids:	83.0
Project:	Former Energy International Parcel, MA		

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	0.35	D008	5.0	0.010	mg/l	1	12/07/10	12/07/10 DA	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA12502
(2) Prep QC Batch: MP16339

RL = Reporting Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Parameter Certifications (MA)
- Chain of Custody
- MCP Form
- EPH Form
- VPH Form
- Sample Tracking Chronicle

Parameter Certification Exceptions

Job Number: M96257
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

The following parameters included in this report are exceptions to NELAC certification.
The certification status of each is indicated below.

Parameter	CAS#	Method	Mat	Certification Status
tert-Amyl Methyl Ether	994-05-8	SW846 8260B	SO	Certified by SOP MMS105/GC-MS
tert-Butyl Ethyl Ether	637-92-3	SW846 8260B	SO	Certified by SOP MMS105/GC-MS
Di-Isopropyl ether	108-20-3	SW846 8260B	SO	Certified by SOP MMS105/GC-MS
Tetrahydrofuran	109-99-9	SW846 8260B	SO	Certified by SOP MMS105/GC-MS

Haley & Aldrich, Inc.
465 Medford St.,
Suite 2200,
Boston, MA 02129-1400

Phone	(617) 886-7400
Fax	(617) 886-7600

Page 2 of 2

DELIVERY DATE 12/1/10
TURNAROUND TIME 10 days
PROJECT MANAGER C. J. JONES

Sampled and Relinquished by		Received by		LIQUID		Sampling Comments	
Sign <i>Matthew</i>	Sign <i>Will</i>			VOA Vial		*if metals exceed 20x RCRA, run TCLP limit if TDT Cr 230 mg/kg, run hex Cr and other releasing tests	
Print MATTHEW DESSON	Print			Amber Glass			
Firm HRA	Firm			Plastic Bottle			
Date 12/10 Time	Date 12/10 Time 510			Preservative			
Relinquished by		Received by		SOLID		Volume	
Sign <i>Will</i>	Sign <i>Will</i>			VOA Vial			
Print	Print			Amber Glass			
Firm	Firm			Clear Glass			
Date 12/10 Time 1650	Date 12/10 Time 1650			Preservative			
Date	Date			Volume			
Relinquished by		Received by		PRESERVATION KEY		Evidence samples were tampered with? YES NO	
Sign	Sign			A Sample chilled B Sample filtered C NaOH D HNO ₃ E H ₂ SO ₄ F HCL G Methanol H Water/NaHSO ₄ (circle)		If YES, please explain in section below.	
Print	Print						
Firm	Firm						
Date	Date						

Presumptive Certainty Data Package (Laboratory to use applicable DEP CAM methods)

If Presumptive Certainty Data Package is needed, initial all sections:

The required minimum field QC samples, as designated in BWSC CAM-VII have been or will be collected, as appropriate, to meet the requirements of Presumptive Certainty.

Matrix Spike (MS) samples for MCP Metals and/or Cyanide are included and identified herein.

This Chain of Custody Record (specify) _____ includes _____ does not include samples defined as Drinking Water Samples.

_____ If this Chain of Custody Record identifies samples defined as Drinking Water Samples, Trip Blanks and Field Duplicates are included and identified and analysis of TICs are required, as appropriate. Laboratory should (specify if applicable) _____ analyze

Required Reporting Limits and Data Quality Objectives

☒ RC-S1 ☐ S1 ☐ GW1
☐ RC-S2 ☐ S2 ☐ GW2
☐ RC-GW1 ☐ S3 ☐ GW3
☐ RC-GW2

WHITE - Laboratory

CANARY - Project Manager

PINK - Haley & Aldrich Laboratory

2104

AUGUST 2008

Form 3003

Page 1 of 1



Massachusetts Department
of Environmental Protection
Bureau of Waste Site Cleanup

WSC-CAM

Exhibit VII A

July 1, 2010

Revision No. 1

Final

Page 13 of 38

Exhibit VII A-2: MassDEP Analytical Protocol Certification Form

MassDEP Analytical Protocol Certification Form

Laboratory Name: Accutest Laboratories of New England

Project #: M96257

Project Location: Former Energy International Parcel, MA

MADEP RTN

None

This form provides certifications for the following data set: list Laboratory Sample ID Numbers(s)
M96257-1 through M96257-9

Matrices: Groundwater/Surface Water () Soil/Sediment (X) Drinking Water () Air () Other ()

CAM Protocol (check all that apply below):

8260 VOC (X) CAM IIA	7470/7471 Hg (X) CAM III B	MassDEP VPH (X) CAM IV A	8081 Pesticides () CAM V B	7196 Hex Cr () CAM VI B	Mass DEP APH () CAM IX A
8270 SVOC (X) CAM II B	7010 Metals () CAM III C	MassDEP EPH (X) CAM IV B	8151 Herbicides () CAM V C	8330 Explosives () CAM VIII A	TO-15 VOC () CAM IX B
6010 Metals (X) CAM III A	6020 Metals () CAM III D	8082 PCB () CAM V A	9014 Total () Cyanide/PAC CAM VI A	6860 Perchlorate () CAM VIII B	

Affirmative Responses to Questions A Through F are required for "Presumptive Certainty status"

A	Were all samples received in a condition consistent with those described on the Chain-of Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
E	VPH, EPH, APH, and TO-15 only: a. VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

Responses to questions G, H, and I below is required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No ¹
Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data useability and representativeness requirements described in 310 CMR 40.1056(2)(k) and WSC-07-350.			
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No ¹
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No ¹

¹ All Negative responses must be addressed in an attached Environmental Laboratory case narrative.

I the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Signature: 

Position: Laboratory Director

Printed Name: Reza Tand

Date: 12/22/2010

MADEP EPH FORM

Matrix	Aqueous <input type="checkbox"/>	Soil <input checked="" type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>	
Aqueous Preservative	N/A <input checked="" type="checkbox"/>	pH <= 2 <input type="checkbox"/>	pH > 2 <input type="checkbox"/>	
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg. C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Rec'd at 2.1 deg C.
Extraction Method	SW846 3545			
Method for Ranges:	MADEP EPH REV 1.1		Client ID:	HA106_0-4'
Method for Targets:	MADEP EPH REV 1.1		Lab ID:	M96257-1
EPH Surrogate Stds.	Aliphatic: 1-Chlorooctadecane		Date Collected:	12/1/2010
	Aromatic: o-Terphenyl		Date Received:	12/1/2010
EPH Fractionation	2-Fluorobiphenyl		Date Extracted:	12/10/2010
Surrogate Standards.	2-Bromonaphthalene		First Date Run:	12/13/2010
			Last Date Run:	N/A
			% Solids:	90.8
			Low Dilution:	1
			High Dilution:	N/A
Unadjusted Ranges	CAS #	Units	Result	RDL
C11-C22 Aromatics (Unadj.)		ug/kg	51900 ^A	19000

Adjusted Ranges				
C9-C18 Aliphatics	ug/kg	ND ^A	9600	
C19-C36 Aliphatics	ug/kg	39800 ^A	9600	
C11-C22 Aromatics	ug/kg	42500 ^C	19000	
Surrogate Recoveries			Acceptance Range	
1-Chlorooctadecane	%	45	40-140 %	
o-Terphenyl	%	95	40-140 %	
2-Fluorobiphenyl	%	84	40-140 %	
2-Bromonaphthalene	%	63	40-140 %	
Footnotes				
A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range				
C Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes				
Z A 'J' qualifier indicates an estimated value				

Were all QA/QC procedures REQUIRED by the EPH Method followed? ☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved? ☒ Yes ☐ No- Details Attached

Were any significant modifications made to the EPH method, as specified in Sect. 11.3? ☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature 

Postition Laboratory Director

Printed Name Reza Tand

Date 12/22/2010

MADEP EPH FORM

Matrix	Aqueous <input type="checkbox"/>	Soil <input checked="" type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>	
Aqueous Preservative	N/A <input checked="" type="checkbox"/>	pH <= 2 <input type="checkbox"/>	pH > 2 <input type="checkbox"/>	
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg. C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Rec'd at 2.1 deg C.
Extraction Method	SW846 3545			
Method for Ranges:	MADEP EPH REV 1.1		Client ID:	HA106_8-12.5'
Method for Targets:	MADEP EPH REV 1.1		Lab ID:	M96257-2
EPH Surrogate Stds.	Aliphatic: 1-Chlorooctadecane		Date Collected:	12/1/2010
	Aromatic: o-Terphenyl		Date Received:	12/1/2010
EPH Fractionation	2-Fluorobiphenyl		Date Extracted:	12/10/2010
Surrogate Standards.	2-Bromonaphthalene		First Date Run:	12/14/2010
			Last Date Run:	N/A
			% Solids:	79.7
			Low Dilution:	5
			High Dilution:	N/A
Unadjusted Ranges	CAS #	Units	Result	RDL
C11-C22 Aromatics (Unadj.)		ug/kg	5510000 ^E	110000

Adjusted Ranges

C9-C18 Aliphatics	ug/kg	265000 ^E	55000
C19-C36 Aliphatics	ug/kg	4860000 ^E	55000
C11-C22 Aromatics	ug/kg	5300000 ^E	110000

Surrogate Recoveries

			Acceptance Range
1-Chlorooctadecane	%	62	40-140 %
o-Terphenyl	%	167 ^F	40-140 %
2-Fluorobiphenyl	%	89	40-140 %
2-Bromonaphthalene	%	71	40-140 %

Footnotes

- ^E Elevated RL due to dilution required for matrix interference.
^F Outside control limits due to matrix interference. Confirmed by reanalysis.
^Z A 'J' qualifier indicates an estimated value

Were all QA/QC procedures REQUIRED by the EPH Method followed?

☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved?

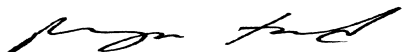
☐ Yes ☒ No- Details Attached

Were any significant modifications made to the EPH method, as specified in Sect. 11.3?

☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature



Postition

Laboratory Director

Printed Name

Reza Tand

Date

12/22/2010

MADEP EPH FORM

Matrix	Aqueous <input type="checkbox"/>	Soil <input checked="" type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>	
Aqueous Preservative	N/A <input checked="" type="checkbox"/>	pH <= 2 <input type="checkbox"/>	pH > 2 <input type="checkbox"/>	
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg. C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Rec'd at 2.1 deg C.
Extraction Method	SW846 3545			
Method for Ranges:	MADEP EPH REV 1.1		Client ID:	HA105_0-4'
Method for Targets:	MADEP EPH REV 1.1		Lab ID:	M96257-3
EPH Surrogate Stds.	Aliphatic: 1-Chlorooctadecane		Date Collected:	12/1/2010
	Aromatic: o-Terphenyl		Date Received:	12/1/2010
EPH Fractionation	2-Fluorobiphenyl		Date Extracted:	12/10/2010
Surrogate Standards.	2-Bromonaphthalene		First Date Run:	12/14/2010
			Last Date Run:	N/A
			% Solids:	89.1
			Low Dilution:	1
			High Dilution:	N/A
Unadjusted Ranges	CAS #	Units	Result	RDL
C11-C22 Aromatics (Unadj.)		ug/kg	158000 ^A	19000

Adjusted Ranges				
C9-C18 Aliphatics	ug/kg	16700 ^A	9600	
C19-C36 Aliphatics	ug/kg	88200 ^A	9600	
C11-C22 Aromatics	ug/kg	129000 ^C	19000	
Surrogate Recoveries			Acceptance Range	
1-Chlorooctadecane	%	41	40-140 %	
o-Terphenyl	%	120	40-140 %	
2-Fluorobiphenyl	%	80	40-140 %	
2-Bromonaphthalene	%	74	40-140 %	
Footnotes				
A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range				
C Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes				
Z A 'J' qualifier indicates an estimated value				

Were all QA/QC procedures REQUIRED by the EPH Method followed? ☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved? ☒ Yes ☐ No- Details Attached

Were any significant modifications made to the EPH method, as specified in Sect. 11.3? ☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature

Reza Tand

Postition

Laboratory Director

Printed Name

Reza Tand

Date

12/22/2010

MADEP EPH FORM

Matrix	Aqueous <input type="checkbox"/>	Soil <input checked="" type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>	
Aqueous Preservative	N/A <input checked="" type="checkbox"/>	pH <= 2 <input type="checkbox"/>	pH > 2 <input type="checkbox"/>	
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg. C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Rec'd at 2.1 deg C.
Extraction Method	SW846 3545			
Method for Ranges:	MADEP EPH REV 1.1		Client ID:	HA105_4-8'
Method for Targets:	MADEP EPH REV 1.1		Lab ID:	M96257-4
EPH Surrogate Stds.	Aliphatic: 1-Chlorooctadecane		Date Collected:	12/1/2010
	Aromatic: o-Terphenyl		Date Received:	12/1/2010
EPH Fractionation	2-Fluorobiphenyl		Date Extracted:	12/16/2010
Surrogate Standards.	2-Bromonaphthalene		First Date Run:	12/16/2010
			Last Date Run:	N/A
			% Solids:	84.9
			Low Dilution:	1
			High Dilution:	N/A
Unadjusted Ranges	CAS #	Units	Result	RDL
C11-C22 Aromatics (Unadj.)		ug/kg	ND ^A	21000

Adjusted Ranges

C9-C18 Aliphatics	ug/kg	ND ^A	11000
C19-C36 Aliphatics	ug/kg	21800 ^A	11000
C11-C22 Aromatics	ug/kg	ND ^C	21000

Surrogate Recoveries

			<u>Acceptance Range</u>
1-Chlorooctadecane	%	57	40-140 %
o-Terphenyl	%	62	40-140 %
2-Fluorobiphenyl	%	71	40-140 %
2-Bromonaphthalene	%	43	40-140 %

Footnotes

- A** Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
- C** Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes
- Z** A 'J' qualifier indicates an estimated value

Were all QA/QC procedures REQUIRED by the EPH Method followed?

☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved?

☒ Yes ☐ No- Details Attached

Were any significant modifications made to the EPH method, as specified in Sect. 11.3?

☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature



Postition

Laboratory Director

Printed Name

Reza Tand

Date

12/22/2010

MADEP EPH FORM

Matrix	Aqueous <input type="checkbox"/>	Soil <input checked="" type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>	
Aqueous Preservative	N/A <input checked="" type="checkbox"/>	pH <= 2 <input type="checkbox"/>	pH > 2 <input type="checkbox"/>	
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg. C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Rec'd at 2.1 deg C.
Extraction Method	SW846 3545			
Method for Ranges:	MADEP EPH REV 1.1		Client ID:	HA104_0-4'
Method for Targets:	MADEP EPH REV 1.1		Lab ID:	M96257-5
EPH Surrogate Stds.	Aliphatic: 1-Chlorooctadecane		Date Collected:	12/1/2010
	Aromatic: o-Terphenyl		Date Received:	12/1/2010
EPH Fractionation	2-Fluorobiphenyl		Date Extracted:	12/10/2010
Surrogate Standards.	2-Bromonaphthalene		First Date Run:	12/14/2010
			Last Date Run:	N/A
			% Solids:	90.6
			Low Dilution:	1
			High Dilution:	N/A
Unadjusted Ranges	CAS #	Units	Result	RDL
C11-C22 Aromatics (Unadj.)		ug/kg	92500 ^A	20000

Adjusted Ranges				
C9-C18 Aliphatics	ug/kg	ND ^A	9900	
C19-C36 Aliphatics	ug/kg	58900 ^A	9900	
C11-C22 Aromatics	ug/kg	69900 ^C	20000	
Surrogate Recoveries			Acceptance Range	
1-Chlorooctadecane	%	41	40-140 %	
o-Terphenyl	%	87	40-140 %	
2-Fluorobiphenyl	%	95	40-140 %	
2-Bromonaphthalene	%	82	40-140 %	
Footnotes				
A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range				
C Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes				
Z A 'J' qualifier indicates an estimated value				

Were all QA/QC procedures REQUIRED by the EPH Method followed? ☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved? ☒ Yes ☐ No- Details Attached

Were any significant modifications made to the EPH method, as specified in Sect. 11.3? ☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature 

Postition Laboratory Director

Printed Name Reza Tand

Date 12/22/2010

MADEP EPH FORM

Matrix	Aqueous <input type="checkbox"/>	Soil <input checked="" type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>	
Aqueous Preservative	N/A <input checked="" type="checkbox"/>	pH <= 2 <input type="checkbox"/>	pH > 2 <input type="checkbox"/>	
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg. C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Rec'd at 2.1 deg C.
Extraction Method	SW846 3545			
Method for Ranges:	MADEP EPH REV 1.1		Client ID:	HA104_8-13.2'
Method for Targets:	MADEP EPH REV 1.1		Lab ID:	M96257-6
EPH Surrogate Stds.	Aliphatic: 1-Chlorooctadecane		Date Collected:	12/1/2010
	Aromatic: o-Terphenyl		Date Received:	12/1/2010
EPH Fractionation	2-Fluorobiphenyl		Date Extracted:	12/10/2010
Surrogate Standards.	2-Bromonaphthalene		First Date Run:	12/16/2010
			Last Date Run:	N/A
			% Solids:	80.1
			Low Dilution:	1
			High Dilution:	N/A
Unadjusted Ranges	CAS #	Units	Result	RDL
C11-C22 Aromatics (Unadj.)		ug/kg	292000 ^A	22000

Adjusted Ranges				
C9-C18 Aliphatics	ug/kg	23000 ^A	11000	
C19-C36 Aliphatics	ug/kg	83100 ^A	11000	
C11-C22 Aromatics	ug/kg	212000 ^C	22000	
Surrogate Recoveries		Acceptance Range		
1-Chlorooctadecane	%	47	40-140 %	
o-Terphenyl	%	122	40-140 %	
2-Fluorobiphenyl	%	93	40-140 %	
2-Bromonaphthalene	%	67	40-140 %	
Footnotes				
A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range				
C Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes				
Z A 'J' qualifier indicates an estimated value				

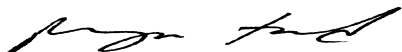
Were all QA/QC procedures REQUIRED by the EPH Method followed? ☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved? ☒ Yes ☐ No- Details Attached

Were any significant modifications made to the EPH method, as specified in Sect. 11.3? ☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature



Postition

Laboratory Director

Printed Name

Reza Tand

Date

12/22/2010

MADEP EPH FORM

Matrix	Aqueous <input type="checkbox"/>	Soil <input checked="" type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>	
Aqueous Preservative	N/A <input checked="" type="checkbox"/>	pH <= 2 <input type="checkbox"/>	pH > 2 <input type="checkbox"/>	
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg. C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Rec'd at 2.1 deg C.
Extraction Method	SW846 3545			
Method for Ranges:	MADEP EPH REV 1.1		Client ID:	HA103_0-4'
Method for Targets:	MADEP EPH REV 1.1		Lab ID:	M96257-7
EPH Surrogate Stds.	Aliphatic: 1-Chlorooctadecane		Date Collected:	12/1/2010
	Aromatic: o-Terphenyl		Date Received:	12/1/2010
EPH Fractionation	2-Fluorobiphenyl		Date Extracted:	12/10/2010
Surrogate Standards.	2-Bromonaphthalene		First Date Run:	12/15/2010
			Last Date Run:	N/A
			% Solids:	90.6
			Low Dilution:	1
			High Dilution:	N/A
Unadjusted Ranges	CAS #	Units	Result	RDL
C11-C22 Aromatics (Unadj.)		ug/kg	167000 ^A	19000

Adjusted Ranges				
C9-C18 Aliphatics	ug/kg	14800 ^A	9400	
C19-C36 Aliphatics	ug/kg	85500 ^A	9400	
C11-C22 Aromatics	ug/kg	138000 ^C	19000	
Surrogate Recoveries			Acceptance Range	
1-Chlorooctadecane	%	29 ^H	40-140 %	
o-Terphenyl	%	101	40-140 %	
2-Fluorobiphenyl	%	92	40-140 %	
2-Bromonaphthalene	%	62	40-140 %	
Footnotes				
A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range				
C Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes				
H Outside control limits due to possible matrix interference. Confirmed by reanalysis.				
Z A 'J' qualifier indicates an estimated value				

Were all QA/QC procedures REQUIRED by the EPH Method followed? ☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved? ☐ Yes ☒ No- Details Attached

Were any significant modifications made to the EPH method, as specified in Sect. 11.3? ☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature

Reza Tand

Postition

Laboratory Director

Printed Name

Reza Tand

Date

12/22/2010

MADEP EPH FORM

Matrix	Aqueous <input type="checkbox"/>	Soil <input checked="" type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>	
Aqueous Preservative	N/A <input checked="" type="checkbox"/>	pH <= 2 <input type="checkbox"/>	pH > 2 <input type="checkbox"/>	
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg. C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Rec'd at 2.1 deg C.
Extraction Method	SW846 3545			
Method for Ranges:	MADEP EPH REV 1.1		Client ID: HA103_4-8'	Lab ID: M96257-8
Method for Targets:	MADEP EPH REV 1.1		Date Collected: 12/1/2010	Date Received: 12/1/2010
EPH Surrogate Stds.	Aliphatic: 1-Chlorooctadecane		Date Extracted: 12/10/2010	First Date Run: 12/14/2010
	Aromatic: o-Terphenyl			Last Date Run: N/A
EPH Fractionation	2-Fluorobiphenyl		% Solids: 81.7	Low Dilution: 1
Surrogate Standards.	2-Bromonaphthalene			High Dilution: N/A
Unadjusted Ranges	CAS #	Units	Result	RDL
C11-C22 Aromatics (Unadj.)		ug/kg	318000 ^A	21000

Adjusted Ranges				
C9-C18 Aliphatics	ug/kg	27500 ^A	11000	
C19-C36 Aliphatics	ug/kg	112000 ^A	11000	
C11-C22 Aromatics	ug/kg	257000 ^C	21000	
Surrogate Recoveries			Acceptance Range	
1-Chlorooctadecane	%	37 ^G	40-140 %	
o-Terphenyl	%	107	40-140 %	
2-Fluorobiphenyl	%	86	40-140 %	
2-Bromonaphthalene	%	59	40-140 %	
Footnotes				
A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range				
C Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes				
G Outside control limits due to possible matrix interference. Confirmed by refractation.				
Z A 'J' qualifier indicates an estimated value				

Were all QA/QC procedures REQUIRED by the EPH Method followed? ☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved? ☐ Yes ☒ No- Details Attached

Were any significant modifications made to the EPH method, as specified in Sect. 11.3? ☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature 

Postition Laboratory Director

Printed Name Reza Tand

Date 12/22/2010

MADEP EPH FORM

Matrix	Aqueous <input type="checkbox"/>	Soil <input checked="" type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>	
Aqueous Preservative	N/A <input checked="" type="checkbox"/>	pH <= 2 <input type="checkbox"/>	pH > 2 <input type="checkbox"/>	
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg. C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Rec'd at 2.1 deg C.
Extraction Method	SW846 3545			
Method for Ranges:	MADEP EPH REV 1.1		Client ID:	HA103_8-12'
Method for Targets:	MADEP EPH REV 1.1		Lab ID:	M96257-9
EPH Surrogate Stds.	Aliphatic: 1-Chlorooctadecane		Date Collected:	12/1/2010
	Aromatic: o-Terphenyl		Date Received:	12/1/2010
EPH Fractionation	2-Fluorobiphenyl		Date Extracted:	12/10/2010
Surrogate Standards.	2-Bromonaphthalene		First Date Run:	12/14/2010
			Last Date Run:	N/A
			% Solids:	83
			Low Dilution:	1
			High Dilution:	N/A
Unadjusted Ranges	CAS #	Units	Result	RDL
C11-C22 Aromatics (Unadj.)		ug/kg	275000 ^A	21000

Adjusted Ranges				
C9-C18 Aliphatics	ug/kg	98200 ^A	11000	
C19-C36 Aliphatics	ug/kg	117000 ^A	11000	
C11-C22 Aromatics	ug/kg	217000 ^C	21000	
Surrogate Recoveries		Acceptance Range		
1-Chlorooctadecane	%	41	40-140 %	
o-Terphenyl	%	122	40-140 %	
2-Fluorobiphenyl	%	91	40-140 %	
2-Bromonaphthalene	%	64	40-140 %	
Footnotes				
A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range				
C Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes				
Z A 'J' qualifier indicates an estimated value				

Were all QA/QC procedures REQUIRED by the EPH Method followed? ☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved? ☒ Yes ☐ No- Details Attached

Were any significant modifications made to the EPH method, as specified in Sect. 11.3? ☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature

Reza Tand

Postition

Laboratory Director

Printed Name

Reza Tand

Date

12/22/2010

MADEP VPH FORM

Matrix	Aqueous <input type="checkbox"/>	Soil <input checked="" type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>	
Aqueous Preservatives	N/A <input checked="" type="checkbox"/>	pH <= 2 <input type="checkbox"/>	pH > 2 <input type="checkbox"/>	
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg. C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Rec'd at 2.1 deg C.
Methanol	Methanol Covering Soil. (mL Methanol/g soil: 1:1 +/- 25%)			
Method for Ranges:	MADEP VPH REV 1.1		Client ID: HA106_0-4	Lab ID: M96257-1
Method for Target Analytes:	MADEP VPH REV 1.1		Date Collected: 12/1/2010	Date Received: 12/1/2010
VPH Surrogate Standards			Date Extracted:	First Date Run:
PID: 2,5-Dibromotoluene			N/A	12/7/2010
FID: 2,5-Dibromotoluene			% Solids:	Low Dilution:
			90.8	1
				Last Date Run:
				N/A
				High Dilution:
				N/A

Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)		N/A	ug/kg	ND ^A	4200	
C9- C10 Aromatics (Unadj.)		N/A	ug/kg	ND ^A	4200	
C9- C12 Aliphatics (Unadj.)		N/A	ug/kg	ND ^A	4200	

Adjusted Ranges	Units	Result	RDL
C5- C8 Aliphatics	ug/kg	ND ^B	4200
C9- C12 Aliphatics	ug/kg	ND ^D	4200

Surrogate Recoveries	%	Acceptance Range
FID:2,5-Dibromotoluene	88	70-130 %
PID:2,5-Dibromotoluene	83	70-130 %

Footnotes

A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range

B Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range.

D Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C9-C12 aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C9-C10 Aromatic Hydrocarbons.

Z A "J" qualifier indicates an estimated value

Were all QA/QC procedures REQUIRED by the VPH Method followed?

☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved?

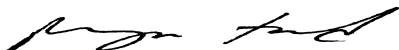
☒ Yes ☐ No- Details Attached

Were any significant modifications made to the VPH method, as specified in Sect. 11.3?

☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature



Postition

Laboratory Director

Printed Name

Reza Tand

Date

12/22/2010

MADEP VPH FORM

Matrix	Aqueous <input type="checkbox"/>	Soil <input checked="" type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>	
Aqueous Preservatives	N/A <input checked="" type="checkbox"/>	pH <= 2 <input type="checkbox"/>	pH > 2 <input type="checkbox"/>	
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg. C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Rec'd at 2.1 deg C.
Methanol	Methanol Covering Soil. (mL Methanol/g soil: 1:1 +/- 25%)			
Method for Ranges:	MADEP VPH REV 1.1		Client ID: HA106_8-12.5'	Lab ID: M96257-2
Method for Target Analytes:	MADEP VPH REV 1.1		Date Collected: 12/1/2010	Date Received: 12/1/2010
VPH Surrogate Standards			Date Extracted:	First Date Run:
PID: 2,5-Dibromotoluene			N/A	12/7/2010
FID: 2,5-Dibromotoluene			% Solids:	Low Dilution:
			79.7	1
				Last Date Run:
				N/A
				High Dilution:
				N/A

Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)		N/A	ug/kg	17100 ^A	6900	
C9- C10 Aromatics (Unadj.)		N/A	ug/kg	18200 ^A	6900	
C9- C12 Aliphatics (Unadj.)		N/A	ug/kg	24500 ^A	6900	

Adjusted Ranges	Units	Result	RDL
C5- C8 Aliphatics	ug/kg	16800 ^B	6900
C9- C12 Aliphatics	ug/kg	ND ^D	6900

Surrogate Recoveries	%	Acceptance Range
FID:2,5-Dibromotoluene	128	70-130 %
PID:2,5-Dibromotoluene	119	70-130 %

Footnotes

A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range

B Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range.

D Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C9-C12 aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C9-C10 Aromatic Hydrocarbons.

Z A 'J' qualifier indicates an estimated value

Were all QA/QC procedures REQUIRED by the VPH Method followed?

☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved?

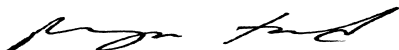
☒ Yes ☐ No- Details Attached

Were any significant modifications made to the VPH method, as specified in Sect. 11.3?

☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature



Postition

Laboratory Director

Printed Name

Reza Tand

Date

12/22/2010

MADEP VPH FORM

Matrix	Aqueous <input type="checkbox"/>	Soil <input checked="" type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>	
Aqueous Preservatives	N/A <input checked="" type="checkbox"/>	pH <= 2 <input type="checkbox"/>	pH > 2 <input type="checkbox"/>	
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg. C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Rec'd at 2.1 deg C.
Methanol	Methanol Covering Soil. (mL Methanol/g soil: Other) NOTE: Ratio > 1.25 to 1.			
Method for Ranges:	MADEP VPH REV 1.1		Client ID: HA105_0-4 ¹	Lab ID: M96257-3
Method for Target Analytes:	MADEP VPH REV 1.1		Date Collected: 12/1/2010	Date Received: 12/1/2010
VPH Surrogate Standards			Date Extracted:	First Date Run:
PID: 2,5-Dibromotoluene			N/A	12/7/2010
FID: 2,5-Dibromotoluene			% Solids:	Low Dilution:
			89.1	1
				Last Date Run:
				N/A
				High Dilution:
				N/A

Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)		N/A	ug/kg	8850 ^A	5300	
C9- C10 Aromatics (Unadj.)		N/A	ug/kg	17300 ^A	5300	
C9- C12 Aliphatics (Unadj.)		N/A	ug/kg	17100 ^A	5300	

Adjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics		N/A	ug/kg	8770 ^B	5300	
C9- C12 Aliphatics		N/A	ug/kg	ND ^D	5300	

Surrogate Recoveries	Acceptance Range
FID:2,5-Dibromotoluene	70-130 %
PID:2,5-Dibromotoluene	70-130 %

Footnotes

A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range

B Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range.

D Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C9-C12 aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C9-C10 Aromatic Hydrocarbons.

Z A "J" qualifier indicates an estimated value

Were all QA/QC procedures REQUIRED by the VPH Method followed? ☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved? ☒ Yes ☐ No- Details Attached

Were any significant modifications made to the VPH method, as specified in Sect. 11.3? ☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature 
 Printed Name Reza Tand

Postition Laboratory Director
 Date 12/22/2010

MADEP VPH FORM

Matrix	Aqueous <input type="checkbox"/>	Soil <input checked="" type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>		
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>			
Aqueous Preservatives	N/A <input checked="" type="checkbox"/>	pH <= 2 <input type="checkbox"/>	pH > 2 <input type="checkbox"/>			
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg. C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Rec'd at 2.1 deg C.		
Methanol	Methanol Covering Soil. (mL Methanol/g soil: 1:1 +/- 25%)					
Method for Ranges:	MADEP VPH REV 1.1		Client ID: HA105_4-8'	Lab ID: M96257-4		
Method for Target Analytes:	MADEP VPH REV 1.1		Date Collected: 12/1/2010	Date Received: 12/1/2010		
VPH Surrogate Standards			Date Extracted:	First Date Run:		
PID: 2,5-Dibromotoluene			N/A	12/7/2010		
FID: 2,5-Dibromotoluene			% Solids:	Low Dilution:		
			84.9	1		
				High Dilution:		
				N/A		
Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)		N/A	ug/kg	ND ^A	6300	
C9- C10 Aromatics (Unadj.)		N/A	ug/kg	8360 ^A	6300	
C9- C12 Aliphatics (Unadj.)		N/A	ug/kg	8370 ^A	6300	
Adjusted Ranges						
C5- C8 Aliphatics		N/A	ug/kg	ND ^B	6300	
C9- C12 Aliphatics		N/A	ug/kg	ND ^D	6300	
Surrogate Recoveries					Acceptance Range	
FID:2,5-Dibromotoluene			%	119	70-130 %	
PID:2,5-Dibromotoluene			%	114	70-130 %	
Footnotes						
A	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range					
B	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range.					
D	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C9-C12 aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C9-C10 Aromatic Hydrocarbons.					
Z	A 'J' qualifier indicates an estimated value					

Were all QA/QC procedures REQUIRED by the VPH Method followed?

☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved?

☒ Yes ☐ No- Details Attached

Were any significant modifications made to the VPH method, as specified in Sect. 11.3?

☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature

Postition

Laboratory Director

Printed Name

Reza Tand

Date

12/22/2010

MADEP VPH FORM

Matrix	Aqueous <input type="checkbox"/>	Soil <input checked="" type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>	
Aqueous Preservatives	N/A <input checked="" type="checkbox"/>	pH <= 2 <input type="checkbox"/>	pH > 2 <input type="checkbox"/>	
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg. C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Rec'd at 2.1 deg C.
Methanol	Methanol Covering Soil. (mL Methanol/g soil: Other) NOTE: Ratio > 1.25 to 1.			
Method for Ranges:	MADEP VPH REV 1.1		Client ID: HA104_0-4 ¹	Lab ID: M96257-5
Method for Target Analytes:	MADEP VPH REV 1.1		Date Collected: 12/1/2010	Date Received: 12/1/2010
VPH Surrogate Standards			Date Extracted:	First Date Run:
PID: 2,5-Dibromotoluene			N/A	12/8/2010
FID: 2,5-Dibromotoluene			% Solids:	Low Dilution:
			90.6	1
				Last Date Run:
				N/A
				High Dilution:
				N/A

Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)		N/A	ug/kg	ND ^A	5100	
C9- C10 Aromatics (Unadj.)		N/A	ug/kg	ND ^A	5100	
C9- C12 Aliphatics (Unadj.)		N/A	ug/kg	ND ^A	5100	

Adjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics		N/A	ug/kg	ND ^B	5100	
C9- C12 Aliphatics		N/A	ug/kg	ND ^D	5100	

Surrogate Recoveries	Acceptance Range
FID:2,5-Dibromotoluene	70-130 %
PID:2,5-Dibromotoluene	70-130 %

Footnotes

A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range

B Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range.

D Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C9-C12 aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C9-C10 Aromatic Hydrocarbons.

Z A "J" qualifier indicates an estimated value

Were all QA/QC procedures REQUIRED by the VPH Method followed? ☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved? ☒ Yes ☐ No- Details Attached

Were any significant modifications made to the VPH method, as specified in Sect. 11.3? ☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature 
 Printed Name Reza Tand

Postition Laboratory Director
 Date 12/22/2010

MADEP VPH FORM

Matrix	Aqueous <input type="checkbox"/>	Soil <input checked="" type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>	
Aqueous Preservatives	N/A <input checked="" type="checkbox"/>	pH <= 2 <input type="checkbox"/>	pH > 2 <input type="checkbox"/>	
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg. C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Rec'd at 2.1 deg C.
Methanol	Methanol Covering Soil. (mL Methanol/g soil: 1:1 +/- 25%)			
Method for Ranges:	MADEP VPH REV 1.1		Client ID: HA104_8-13.2'	Lab ID: M96257-6
Method for Target Analytes:	MADEP VPH REV 1.1		Date Collected: 12/1/2010	Date Received: 12/1/2010
VPH Surrogate Standards			Date Extracted:	First Date Run:
PID: 2,5-Dibromotoluene			N/A	12/8/2010
FID: 2,5-Dibromotoluene			% Solids:	Low Dilution:
			80.1	1
				Last Date Run:
				N/A
				High Dilution:
				N/A

Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)		N/A	ug/kg	ND ^A	7800	
C9- C10 Aromatics (Unadj.)		N/A	ug/kg	ND ^A	7800	
C9- C12 Aliphatics (Unadj.)		N/A	ug/kg	ND ^A	7800	

Adjusted Ranges	Units	Result	RDL
C5- C8 Aliphatics	ug/kg	ND ^B	7800
C9- C12 Aliphatics	ug/kg	ND ^D	7800

Surrogate Recoveries	Acceptance Range
FID:2,5-Dibromotoluene	70-130 %
PID:2,5-Dibromotoluene	70-130 %

Footnotes

A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range

B Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range.

D Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C9-C12 aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C9-C10 Aromatic Hydrocarbons.

Z A 'J' qualifier indicates an estimated value

Were all QA/QC procedures REQUIRED by the VPH Method followed? ☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved? ☒ Yes ☐ No- Details Attached

Were any significant modifications made to the VPH method, as specified in Sect. 11.3? ☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature 
 Printed Name Reza Tand

Postition Laboratory Director
 Date 12/22/2010

MADEP VPH FORM

Matrix	Aqueous <input type="checkbox"/>	Soil <input checked="" type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>	
Aqueous Preservatives	N/A <input checked="" type="checkbox"/>	pH <= 2 <input type="checkbox"/>	pH > 2 <input type="checkbox"/>	
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg. C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Rec'd at 2.1 deg C.
Methanol	Methanol Covering Soil. (mL Methanol/g soil: 1:1 +/- 25%)			
Method for Ranges:	MADEP VPH REV 1.1		Client ID: HA103_0-4 ¹	Lab ID: M96257-7
Method for Target Analytes:	MADEP VPH REV 1.1		Date Collected: 12/1/2010	Date Received: 12/1/2010
VPH Surrogate Standards			Date Extracted:	First Date Run:
PID: 2,5-Dibromotoluene			N/A	12/8/2010
FID: 2,5-Dibromotoluene			% Solids:	Low Dilution:
			90.6	1
				Last Date Run:
				N/A
				High Dilution:
				N/A

Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)		N/A	ug/kg	ND ^A	5700	
C9- C10 Aromatics (Unadj.)		N/A	ug/kg	ND ^A	5700	
C9- C12 Aliphatics (Unadj.)		N/A	ug/kg	ND ^A	5700	

Adjusted Ranges	Units	Result	RDL
C5- C8 Aliphatics	ug/kg	ND ^B	5700
C9- C12 Aliphatics	ug/kg	ND ^D	5700

Surrogate Recoveries	%	Acceptance Range
FID:2,5-Dibromotoluene	107	70-130 %
PID:2,5-Dibromotoluene	100	70-130 %

Footnotes

A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range

B Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range.

D Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C9-C12 aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C9-C10 Aromatic Hydrocarbons.

Z A "J" qualifier indicates an estimated value

Were all QA/QC procedures REQUIRED by the VPH Method followed?

☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved?

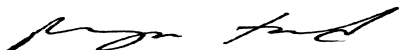
☒ Yes ☐ No- Details Attached

Were any significant modifications made to the VPH method, as specified in Sect. 11.3?

☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature



Postition

Laboratory Director

Printed Name

Reza Tand

Date

12/22/2010

MADEP VPH FORM

Matrix	Aqueous <input type="checkbox"/>	Soil <input checked="" type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>	
Aqueous Preservatives	N/A <input checked="" type="checkbox"/>	pH <= 2 <input type="checkbox"/>	pH > 2 <input type="checkbox"/>	
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg. C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Rec'd at 2.1 deg C.
Methanol	Methanol Covering Soil. (mL Methanol/g soil: 1:1 +/- 25%)			
Method for Ranges:	MADEP VPH REV 1.1		Client ID: HA103_4-8	Lab ID: M96257-8
Method for Target Analytes:	MADEP VPH REV 1.1		Date Collected: 12/1/2010	Date Received: 12/1/2010
VPH Surrogate Standards			Date Extracted:	First Date Run:
PID: 2,5-Dibromotoluene			N/A	12/8/2010
FID: 2,5-Dibromotoluene			% Solids:	Low Dilution:
			81.7	1
				Last Date Run:
				N/A
				High Dilution:
				N/A

Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)		N/A	ug/kg	ND ^A	8500	
C9- C10 Aromatics (Unadj.)		N/A	ug/kg	ND ^A	8500	
C9- C12 Aliphatics (Unadj.)		N/A	ug/kg	12600 ^A	8500	

Adjusted Ranges	Units	Result	RDL
C5- C8 Aliphatics	ug/kg	ND ^B	8500
C9- C12 Aliphatics	ug/kg	ND ^D	8500

Surrogate Recoveries	%	Acceptance Range
FID:2,5-Dibromotoluene	109	70-130 %
PID:2,5-Dibromotoluene	96	70-130 %

Footnotes

A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range

B Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range.

D Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C9-C12 aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C9-C10 Aromatic Hydrocarbons.

Z A "J" qualifier indicates an estimated value

Were all QA/QC procedures REQUIRED by the VPH Method followed?

☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved?

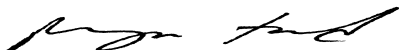
☒ Yes ☐ No- Details Attached

Were any significant modifications made to the VPH method, as specified in Sect. 11.3?

☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature



Postition

Laboratory Director

Printed Name

Reza Tand

Date

12/22/2010

MADEP VPH FORM

Matrix	Aqueous <input type="checkbox"/>	Soil <input checked="" type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>		
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>			
Aqueous Preservatives	N/A <input checked="" type="checkbox"/>	pH <= 2 <input type="checkbox"/>	pH > 2 <input type="checkbox"/>			
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg. C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Rec'd at 2.1 deg C.		
Methanol	Methanol Covering Soil. (mL Methanol/g soil: Other) NOTE: Ratio > 1.25 to 1.					
Method for Ranges:	MADEP VPH REV 1.1		Client ID: HA103_8-12'	Lab ID: M96257-9		
Method for Target Analytes:	MADEP VPH REV 1.1		Date Collected: 12/1/2010	Date Received: 12/1/2010		
VPH Surrogate Standards			Date Extracted:	First Date Run:		
PID: 2,5-Dibromotoluene			N/A	12/8/2010		
FID: 2,5-Dibromotoluene			% Solids:	Low Dilution:		
			83	1		
				High Dilution:		
				N/A		
Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)		N/A	ug/kg	ND ^A	5900	
C9- C10 Aromatics (Unadj.)		N/A	ug/kg	19300 ^A	5900	
C9- C12 Aliphatics (Unadj.)		N/A	ug/kg	33200 ^A	5900	
Adjusted Ranges						
C5- C8 Aliphatics		N/A	ug/kg	ND ^B	5900	
C9- C12 Aliphatics		N/A	ug/kg	13900 ^D	5900	
Surrogate Recoveries					Acceptance Range	
FID:2,5-Dibromotoluene			%	128	70-130 %	
PID:2,5-Dibromotoluene			%	124	70-130 %	
Footnotes						
A	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range					
B	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range.					
D	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C9-C12 aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C9-C10 Aromatic Hydrocarbons.					
Z	A 'J' qualifier indicates an estimated value					

Were all QA/QC procedures REQUIRED by the VPH Method followed?

☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved?

☒ Yes ☐ No- Details Attached

Were any significant modifications made to the VPH method, as specified in Sect. 11.3?

☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature

Postition

Laboratory Director

Printed Name

Reza Tand

Date

12/22/2010

Internal Sample Tracking Chronicle

Haley & Aldrich

Job No: M96257

Former Energy International Parcel, MA
Project No: 06318-502

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M96257-1 Collected: 01-DEC-10 08:15 By: MD Received: 01-DEC-10 By: JB HA106_0-4'						
M96257-1	SW846 6010C	02-DEC-10 22:19	DA	02-DEC-10	EM	AG,AS,BA,BE,CD,CR,NI,PB,SB,SE,TL,V,ZN
M96257-1	ASTM D1498-76M	03-DEC-10	MC			EH
M96257-1	SM21 2540 B MOD.	03-DEC-10	HS			% SOL
M96257-1	SW846 CHAP7	03-DEC-10	MA			CORR
M96257-1	SW846 7471A	03-DEC-10 15:49	PY	03-DEC-10	EM	HG
M96257-1	SW846 8260B	07-DEC-10 20:48	GK			V8260MCP
M96257-1	MADEP VPH REV 1.1	07-DEC-10 21:45	WS			VMAVPHR
M96257-1	SW846 CHAP7	08-DEC-10	BF	08-DEC-10	BF	CREAC,SREAC
M96257-1	SW846 CHAP7	08-DEC-10	BF	08-DEC-10	BF	CREAC,SREAC
M96257-1	SW846 1020	08-DEC-10	BF			IGN
M96257-1	SW846 8270C	13-DEC-10 17:10	PR	06-DEC-10	MEW	AB8270MCP
M96257-1	MADEP EPH REV 1.1	13-DEC-10 19:13	JD	10-DEC-10	AF	BMAEPHR
M96257-2 Collected: 01-DEC-10 09:30 By: MD Received: 01-DEC-10 By: JB HA106_8-12.5'						
M96257-2	SW846 6010C	02-DEC-10 22:23	DA	02-DEC-10	EM	AG,AS,BA,BE,CD,CR,NI,PB,SB,SE,TL,V,ZN
M96257-2	ASTM D1498-76M	03-DEC-10	MC			EH
M96257-2	SM21 2540 B MOD.	03-DEC-10	HS			% SOL
M96257-2	SW846 CHAP7	03-DEC-10	MA			CORR
M96257-2	SW846 7471A	03-DEC-10 16:34	PY	03-DEC-10	EM	HG
M96257-2	MADEP VPH REV 1.1	07-DEC-10 22:24	WS			VMAVPHR
M96257-2	SW846 8260B	07-DEC-10 23:31	GK			V8260MCP
M96257-2	SW846 CHAP7	08-DEC-10	BF	08-DEC-10	BF	CREAC,SREAC
M96257-2	SW846 1020	08-DEC-10	BF			IGN
M96257-2	SW846 CHAP7	08-DEC-10	BF	08-DEC-10	BF	CREAC,SREAC
M96257-2	SW846 8260B	09-DEC-10 23:01	GK			V8260MCP
M96257-2	SW846 8270C	13-DEC-10 17:39	PR	06-DEC-10	MEW	AB8270MCP
M96257-2	MADEP EPH REV 1.1	14-DEC-10 11:37	JD	10-DEC-10	AF	BMAEPHR
M96257-3 Collected: 01-DEC-10 14:00 By: MD Received: 01-DEC-10 By: JB HA105_0-4'						
M96257-3	SW846 6010C	02-DEC-10 22:28	DA	02-DEC-10	EM	AG,AS,BA,BE,CD,CR,NI,PB,SB,SE,TL,V,ZN

Internal Sample Tracking Chronicle

Haley & Aldrich

Job No: M96257

Former Energy International Parcel, MA
Project No: 06318-502

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M96257-3	ASTM D1498-76M	03-DEC-10	MC			EH
M96257-3	SM21 2540 B MOD.	03-DEC-10	HS			%SOL
M96257-3	SW846 CHAP7	03-DEC-10	MA			CORR
M96257-3	SW846 7471A	03-DEC-10 16:37	PY	03-DEC-10	EM	HG
M96257-3	SW846 8260B	07-DEC-10 22:37	GK			V8260MCP
M96257-3	MADEP VPH REV 1.1	07-DEC-10 23:04	WS			VMAVPHR
M96257-3	SW846 CHAP7	08-DEC-10	BF	08-DEC-10	BF	CREAC,SREAC
M96257-3	SW846 CHAP7	08-DEC-10	BF	08-DEC-10	BF	CREAC,SREAC
M96257-3	SW846 1020	08-DEC-10	BF			IGN
M96257-3	SW846 8270C	13-DEC-10 18:07	PR	06-DEC-10	MEW	AB8270MCP
M96257-3	MADEP EPH REV 1.1	14-DEC-10 00:41	JD	10-DEC-10	AF	BMAEPHR

M96257-4 Collected: 01-DEC-10 14:25 By: MD Received: 01-DEC-10 By: JB
HA105_4-8'

M96257-4	SW846 6010C	02-DEC-10 22:32	DA	02-DEC-10	EM	AG,AS,BA,BE,CD,CR,NI,PB,SB,SE,TL,V,ZN
M96257-4	ASTM D1498-76M	03-DEC-10	MC			EH
M96257-4	SM21 2540 B MOD.	03-DEC-10	HS			%SOL
M96257-4	SW846 CHAP7	03-DEC-10	MA			CORR
M96257-4	SW846 7471A	03-DEC-10 15:56	PY	03-DEC-10	EM	HG
M96257-4	SW846 8260B	07-DEC-10 21:15	GK			V8260MCP
M96257-4	MADEP VPH REV 1.1	07-DEC-10 23:44	WS			VMAVPHR
M96257-4	SW846 CHAP7	08-DEC-10	BF	08-DEC-10	BF	CREAC,SREAC
M96257-4	SW846 1020	08-DEC-10	BF			IGN
M96257-4	SW846 CHAP7	08-DEC-10	BF	08-DEC-10	BF	CREAC,SREAC
M96257-4	SW846 8270C	13-DEC-10 18:36	PR	06-DEC-10	MEW	AB8270MCP
M96257-4	MADEP EPH REV 1.1	16-DEC-10 00:13	JD	10-DEC-10	AF	BMAEPHR

M96257-5 Collected: 01-DEC-10 12:30 By: MD Received: 01-DEC-10 By: JB
HA104_0-4'

M96257-5	SW846 6010C	02-DEC-10 22:36	DA	02-DEC-10	EM	AG,AS,BA,BE,CD,CR,NI,PB,SB,SE,TL,V,ZN
M96257-5	ASTM D1498-76M	03-DEC-10	MC			EH
M96257-5	SM21 2540 B MOD.	03-DEC-10	HS			%SOL
M96257-5	SW846 CHAP7	03-DEC-10	MA			CORR
M96257-5	SW846 7471A	03-DEC-10 15:58	PY	03-DEC-10	EM	HG
M96257-5	SW846 8260B	07-DEC-10 22:10	GK			V8260MCP
M96257-5	SW846 CHAP7	08-DEC-10	BF	08-DEC-10	BF	CREAC,SREAC

Internal Sample Tracking Chronicle

Haley & Aldrich

Job No: M96257

Former Energy International Parcel, MA
Project No: 06318-502

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M96257-5	SW846 CHAP7	08-DEC-10	BF	08-DEC-10	BF	CREAC,SREAC
M96257-5	SW846 1020	08-DEC-10	BF			IGN
M96257-5	MADEP VPH REV 1.1	08-DEC-10 00:24	WS			VMAVPHR
M96257-5	SW846 8270C	13-DEC-10 19:05	PR	06-DEC-10	MEW	AB8270MCP
M96257-5	MADEP EPH REV 1.1	14-DEC-10 08:35	JD	10-DEC-10	AF	BMAEPHR
M96257-6 Collected: 01-DEC-10 13:05 By: MD Received: 01-DEC-10 By: JB HA104_8-13.2'						
M96257-6	ASTM D1498-76M	03-DEC-10	MC			EH
M96257-6	SM21 2540 B MOD.	03-DEC-10	HS			%SOL
M96257-6	SW846 CHAP7	03-DEC-10	MA			CORR
M96257-6	SW846 6010C	06-DEC-10 20:32	DA	06-DEC-10	EM	AG,AS,BA,BE,CD,CR,NI,PB,SB, SE,TL,V,ZN
M96257-6	SW846 CHAP7	08-DEC-10	BF	08-DEC-10	BF	CREAC,SREAC
M96257-6	SW846 CHAP7	08-DEC-10	BF	08-DEC-10	BF	CREAC,SREAC
M96257-6	SW846 1020	08-DEC-10	BF			IGN
M96257-6	MADEP VPH REV 1.1	08-DEC-10 01:03	WS			VMAVPHR
M96257-6	SW846 7471A	08-DEC-10 14:05	PY	07-DEC-10	EM	HG
M96257-6	SW846 8260B	09-DEC-10 18:03	GK			V8260MCP
M96257-6	SW846 8270C	13-DEC-10 19:33	PR	06-DEC-10	MEW	AB8270MCP
M96257-6	MADEP EPH REV 1.1	16-DEC-10 01:26	JD	10-DEC-10	AF	BMAEPHR
M96257-7 Collected: 01-DEC-10 10:30 By: MD Received: 01-DEC-10 By: JB HA103_0-4'						
M96257-7	SW846 6010C	02-DEC-10 22:45	DA	02-DEC-10	EM	AG,AS,BA,BE,CD,CR,NI,PB,SB, SE,TL,V,ZN
M96257-7	ASTM D1498-76M	03-DEC-10	MC			EH
M96257-7	SM21 2540 B MOD.	03-DEC-10	HS			%SOL
M96257-7	SW846 CHAP7	03-DEC-10	MA			CORR
M96257-7	SW846 7471A	03-DEC-10 16:05	PY	03-DEC-10	EM	HG
M96257-7	SW846 8260B	07-DEC-10 21:43	GK			V8260MCP
M96257-7	SW846 CHAP7	08-DEC-10	BF	08-DEC-10	BF	CREAC,SREAC
M96257-7	SW846 CHAP7	08-DEC-10	BF	08-DEC-10	BF	CREAC,SREAC
M96257-7	SW846 1020	08-DEC-10	BF			IGN
M96257-7	MADEP VPH REV 1.1	08-DEC-10 01:43	WS			VMAVPHR
M96257-7	SW846 8270C	13-DEC-10 20:02	PR	06-DEC-10	MEW	AB8270MCP
M96257-7	MADEP EPH REV 1.1	15-DEC-10 18:46	JD	10-DEC-10	AF	BMAEPHR

Internal Sample Tracking Chronicle

Haley & Aldrich

Job No: M96257

Former Energy International Parcel, MA
Project No: 06318-502

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M96257-8 Collected: 01-DEC-10 10:50 By: MD Received: 01-DEC-10 By: JB HA103_4-8'						
M96257-8	SW846 6010C	02-DEC-10 22:50	DA	02-DEC-10	EM	AG,AS,BA,BE,CD,CR,NI,PB,SB,SE,TL,V,ZN
M96257-8	ASTM D1498-76M	03-DEC-10	MC			EH
M96257-8	SM21 2540 B MOD.	03-DEC-10	HS			%SOL
M96257-8	SW846 CHAP7	03-DEC-10	MA			CORR
M96257-8	SW846 7471A	03-DEC-10 16:07	PY	03-DEC-10	EM	HG
M96257-8	SW846 CHAP7	08-DEC-10	BF	08-DEC-10	BF	CREAC,SREAC
M96257-8	SW846 CHAP7	08-DEC-10	BF	08-DEC-10	BF	CREAC,SREAC
M96257-8	SW846 1020	08-DEC-10	BF			IGN
M96257-8	MADEP VPH REV 1.1	08-DEC-10 02:22	WS			VMAVPHR
M96257-8	SW846 8260B	09-DEC-10 15:21	GK			V8260MCP
M96257-8	SW846 8270C	13-DEC-10 20:31	PR	06-DEC-10	MEW	AB8270MCP
M96257-8	MADEP EPH REV 1.1	14-DEC-10 06:09	JD	10-DEC-10	AF	BMAEPHR
M96257-9 Collected: 01-DEC-10 11:10 By: MD Received: 01-DEC-10 By: JB HA103_8-12'						
M96257-9	SW846 6010C	02-DEC-10 22:54	DA	02-DEC-10	EM	AG,AS,BA,BE,CD,CR,NI,PB,SE,TL,V,ZN
M96257-9	ASTM D1498-76M	03-DEC-10	MC			EH
M96257-9	SM21 2540 B MOD.	03-DEC-10	HS			%SOL
M96257-9	SW846 CHAP7	03-DEC-10	MA			CORR
M96257-9	SW846 6010C	03-DEC-10 13:17	DA	02-DEC-10	EM	SB
M96257-9	SW846 7471A	03-DEC-10 16:39	PY	03-DEC-10	EM	HG
M96257-9	SW846 CHAP7	08-DEC-10	BF	08-DEC-10	BF	CREAC,SREAC
M96257-9	SW846 CHAP7	08-DEC-10	BF	08-DEC-10	BF	CREAC,SREAC
M96257-9	SW846 1020	08-DEC-10	BF			IGN
M96257-9	MADEP VPH REV 1.1	08-DEC-10 03:02	WS			VMAVPHR
M96257-9	SW846 8260B	09-DEC-10 15:48	GK			V8260MCP
M96257-9	SW846 8270C	13-DEC-10 21:00	PR	06-DEC-10	MEW	AB8270MCP
M96257-9	MADEP EPH REV 1.1	14-DEC-10 01:54	JD	10-DEC-10	AF	BMAEPHR
M96257-1A Collected: 01-DEC-10 08:15 By: MD Received: 01-DEC-10 By: JB HA106_0-4'						
M96257-1A	SW846 6010C	07-DEC-10 21:46	DA	07-DEC-10	EM	EPB

Internal Sample Tracking Chronicle

Haley & Aldrich

Job No: M96257

Former Energy International Parcel, MA
Project No: 06318-502

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M96257-2A Collected: 01-DEC-10 09:30 By: MD Received: 01-DEC-10 By: JB HA106_8-12.5'						
M96257-2A	SW846 6010C	07-DEC-10 21:50	DA	07-DEC-10	EM	EPB
M96257-3A Collected: 01-DEC-10 14:00 By: MD Received: 01-DEC-10 By: JB HA105_0-4'						
M96257-3A	SW846 6010C	07-DEC-10 21:55	DA	07-DEC-10	EM	EPB
M96257-4A Collected: 01-DEC-10 14:25 By: MD Received: 01-DEC-10 By: JB HA105_4-8'						
M96257-4A	SW846 6010C	07-DEC-10 21:59	DA	07-DEC-10	EM	EPB
M96257-5A Collected: 01-DEC-10 12:30 By: MD Received: 01-DEC-10 By: JB HA104_0-4'						
M96257-5A	SW846 6010C	07-DEC-10 22:04	DA	07-DEC-10	EM	EPB
M96257-6A Collected: 01-DEC-10 13:05 By: MD Received: 01-DEC-10 By: JB HA104_8-13.2'						
M96257-6A	SW846 6010C	07-DEC-10 22:08	DA	07-DEC-10	EM	EPB
M96257-7A Collected: 01-DEC-10 10:30 By: MD Received: 01-DEC-10 By: JB HA103_0-4'						
M96257-7A	SW846 6010C	07-DEC-10 22:13	DA	07-DEC-10	EM	EPB
M96257-8A Collected: 01-DEC-10 10:50 By: MD Received: 01-DEC-10 By: JB HA103_4-8'						
M96257-8A	SW846 6010C	07-DEC-10 22:17	DA	07-DEC-10	EM	EPB
M96257-9A Collected: 01-DEC-10 11:10 By: MD Received: 01-DEC-10 By: JB HA103_8-12'						
M96257-9A	SW846 6010C	07-DEC-10 22:22	DA	07-DEC-10	EM	EPB

GC/MS Volatiles

5

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Page 1 of 3

Job Number: M96257

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSR663-MB	R18611A.D	1	12/07/10	GK	n/a	n/a	MSR663

The QC reported here applies to the following samples:

Method: SW846 8260B

M96257-1, M96257-2, M96257-3, M96257-4, M96257-5, M96257-7

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	250	ug/kg	
71-43-2	Benzene	ND	25	ug/kg	
108-86-1	Bromobenzene	ND	250	ug/kg	
74-97-5	Bromochloromethane	ND	250	ug/kg	
75-27-4	Bromodichloromethane	ND	100	ug/kg	
75-25-2	Bromoform	ND	100	ug/kg	
74-83-9	Bromomethane	ND	100	ug/kg	
78-93-3	2-Butanone (MEK)	ND	250	ug/kg	
104-51-8	n-Butylbenzene	ND	250	ug/kg	
135-98-8	sec-Butylbenzene	ND	250	ug/kg	
98-06-6	tert-Butylbenzene	ND	250	ug/kg	
75-15-0	Carbon disulfide	ND	250	ug/kg	
56-23-5	Carbon tetrachloride	ND	100	ug/kg	
108-90-7	Chlorobenzene	ND	100	ug/kg	
75-00-3	Chloroethane	ND	250	ug/kg	
67-66-3	Chloroform	ND	100	ug/kg	
74-87-3	Chloromethane	ND	250	ug/kg	
95-49-8	o-Chlorotoluene	ND	250	ug/kg	
106-43-4	p-Chlorotoluene	ND	250	ug/kg	
108-20-3	Di-Isopropyl ether	ND	100	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	250	ug/kg	
124-48-1	Dibromochloromethane	ND	100	ug/kg	
106-93-4	1,2-Dibromoethane	ND	100	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	100	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	100	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	100	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	100	ug/kg	
75-34-3	1,1-Dichloroethane	ND	100	ug/kg	
107-06-2	1,2-Dichloroethane	ND	100	ug/kg	
75-35-4	1,1-Dichloroethene	ND	100	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	100	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	100	ug/kg	
78-87-5	1,2-Dichloropropane	ND	100	ug/kg	
142-28-9	1,3-Dichloropropane	ND	250	ug/kg	
594-20-7	2,2-Dichloropropane	ND	250	ug/kg	
563-58-6	1,1-Dichloropropene	ND	250	ug/kg	

Method Blank Summary

Job Number: M96257
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSR663-MB	R18611A.D	1	12/07/10	GK	n/a	n/a	MSR663

The QC reported here applies to the following samples:

Method: SW846 8260B

M96257-1, M96257-2, M96257-3, M96257-4, M96257-5, M96257-7

CAS No.	Compound	Result	RL	Units	Q
10061-01-5	cis-1,3-Dichloropropene	ND	100	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	100	ug/kg	
123-91-1	1,4-Dioxane	ND	1300	ug/kg	
60-29-7	Ethyl Ether	ND	250	ug/kg	
100-41-4	Ethylbenzene	ND	100	ug/kg	
87-68-3	Hexachlorobutadiene	ND	250	ug/kg	
591-78-6	2-Hexanone	ND	250	ug/kg	
98-82-8	Isopropylbenzene	ND	250	ug/kg	
99-87-6	p-Isopropyltoluene	ND	250	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	100	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	250	ug/kg	
74-95-3	Methylene bromide	ND	250	ug/kg	
75-09-2	Methylene chloride	ND	100	ug/kg	
91-20-3	Naphthalene	ND	250	ug/kg	
103-65-1	n-Propylbenzene	ND	250	ug/kg	
100-42-5	Styrene	ND	250	ug/kg	
994-05-8	tert-Amyl Methyl Ether	ND	250	ug/kg	
637-92-3	tert-Butyl Ethyl Ether	ND	100	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	250	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	100	ug/kg	
127-18-4	Tetrachloroethene	ND	100	ug/kg	
109-99-9	Tetrahydrofuran	ND	500	ug/kg	
108-88-3	Toluene	ND	250	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	250	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	250	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	100	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	100	ug/kg	
79-01-6	Trichloroethene	ND	100	ug/kg	
75-69-4	Trichlorofluoromethane	ND	100	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	250	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	250	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	250	ug/kg	
75-01-4	Vinyl chloride	ND	100	ug/kg	
	m,p-Xylene	ND	100	ug/kg	
95-47-6	o-Xylene	ND	100	ug/kg	
1330-20-7	Xylene (total)	ND	100	ug/kg	

Method Blank Summary

Job Number: M96257
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSR663-MB	R18611A.D	1	12/07/10	GK	n/a	n/a	MSR663

The QC reported here applies to the following samples: Method: SW846 8260B

M96257-1, M96257-2, M96257-3, M96257-4, M96257-5, M96257-7

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	114% 70-130%
2037-26-5	Toluene-D8	114% 70-130%
460-00-4	4-Bromofluorobenzene	111% 70-130%

Method Blank Summary

Page 1 of 3

Job Number: M96257
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSR666-MB	R18672A.D	1	12/09/10	GK	n/a	n/a	MSR666

The QC reported here applies to the following samples:

Method: SW846 8260B

M96257-6, M96257-8, M96257-9

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	250	ug/kg	
71-43-2	Benzene	ND	25	ug/kg	
108-86-1	Bromobenzene	ND	250	ug/kg	
74-97-5	Bromochloromethane	ND	250	ug/kg	
75-27-4	Bromodichloromethane	ND	100	ug/kg	
75-25-2	Bromoform	ND	100	ug/kg	
74-83-9	Bromomethane	ND	100	ug/kg	
78-93-3	2-Butanone (MEK)	ND	250	ug/kg	
104-51-8	n-Butylbenzene	ND	250	ug/kg	
135-98-8	sec-Butylbenzene	ND	250	ug/kg	
98-06-6	tert-Butylbenzene	ND	250	ug/kg	
75-15-0	Carbon disulfide	ND	250	ug/kg	
56-23-5	Carbon tetrachloride	ND	100	ug/kg	
108-90-7	Chlorobenzene	ND	100	ug/kg	
75-00-3	Chloroethane	ND	250	ug/kg	
67-66-3	Chloroform	ND	100	ug/kg	
74-87-3	Chloromethane	ND	250	ug/kg	
95-49-8	o-Chlorotoluene	ND	250	ug/kg	
106-43-4	p-Chlorotoluene	ND	250	ug/kg	
108-20-3	Di-Isopropyl ether	ND	100	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	250	ug/kg	
124-48-1	Dibromochloromethane	ND	100	ug/kg	
106-93-4	1,2-Dibromoethane	ND	100	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	100	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	100	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	100	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	100	ug/kg	
75-34-3	1,1-Dichloroethane	ND	100	ug/kg	
107-06-2	1,2-Dichloroethane	ND	100	ug/kg	
75-35-4	1,1-Dichloroethene	ND	100	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	100	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	100	ug/kg	
78-87-5	1,2-Dichloropropane	ND	100	ug/kg	
142-28-9	1,3-Dichloropropane	ND	250	ug/kg	
594-20-7	2,2-Dichloropropane	ND	250	ug/kg	
563-58-6	1,1-Dichloropropene	ND	250	ug/kg	

Method Blank Summary

Page 2 of 3

Job Number: M96257
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSR666-MB	R18672A.D	1	12/09/10	GK	n/a	n/a	MSR666

The QC reported here applies to the following samples:

Method: SW846 8260B

M96257-6, M96257-8, M96257-9

CAS No.	Compound	Result	RL	Units	Q
10061-01-5	cis-1,3-Dichloropropene	ND	100	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	100	ug/kg	
123-91-1	1,4-Dioxane	ND	1300	ug/kg	
60-29-7	Ethyl Ether	ND	250	ug/kg	
100-41-4	Ethylbenzene	ND	100	ug/kg	
87-68-3	Hexachlorobutadiene	ND	250	ug/kg	
591-78-6	2-Hexanone	ND	250	ug/kg	
98-82-8	Isopropylbenzene	ND	250	ug/kg	
99-87-6	p-Isopropyltoluene	ND	250	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	100	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	250	ug/kg	
74-95-3	Methylene bromide	ND	250	ug/kg	
75-09-2	Methylene chloride	ND	100	ug/kg	
91-20-3	Naphthalene	ND	250	ug/kg	
103-65-1	n-Propylbenzene	ND	250	ug/kg	
100-42-5	Styrene	ND	250	ug/kg	
994-05-8	tert-Amyl Methyl Ether	ND	250	ug/kg	
637-92-3	tert-Butyl Ethyl Ether	ND	100	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	250	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	100	ug/kg	
127-18-4	Tetrachloroethene	ND	100	ug/kg	
109-99-9	Tetrahydrofuran	ND	500	ug/kg	
108-88-3	Toluene	ND	250	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	250	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	250	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	100	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	100	ug/kg	
79-01-6	Trichloroethene	ND	100	ug/kg	
75-69-4	Trichlorofluoromethane	ND	100	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	250	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	250	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	250	ug/kg	
75-01-4	Vinyl chloride	ND	100	ug/kg	
	m,p-Xylene	ND	100	ug/kg	
95-47-6	o-Xylene	ND	100	ug/kg	
1330-20-7	Xylene (total)	ND	100	ug/kg	

Method Blank Summary

Job Number: M96257
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSR666-MB	R18672A.D	1	12/09/10	GK	n/a	n/a	MSR666

The QC reported here applies to the following samples: Method: SW846 8260B

M96257-6, M96257-8, M96257-9

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	104% 70-130%
2037-26-5	Toluene-D8	107% 70-130%
460-00-4	4-Bromofluorobenzene	105% 70-130%

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 3

Job Number: M96257

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSR663-BS	R18608A.D	1	12/07/10	GK	n/a	n/a	MSR663
MSR663-BSD	R18609A.D	1	12/07/10	GK	n/a	n/a	MSR663

The QC reported here applies to the following samples:

Method: SW846 8260B

M96257-1, M96257-2, M96257-3, M96257-4, M96257-5, M96257-7

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	2500	2410	96	2160	86	11	70-130/25
71-43-2	Benzene	2500	2740	110	2850	114	4	70-130/25
108-86-1	Bromobenzene	2500	2910	116	2980	119	2	70-130/25
74-97-5	Bromochloromethane	2500	2840	114	2870	115	1	70-130/25
75-27-4	Bromodichloromethane	2500	2950	118	3040	122	3	70-130/25
75-25-2	Bromoform	2500	2900	116	2880	115	1	70-130/25
74-83-9	Bromomethane	2500	2500	100	2590	104	4	70-130/25
78-93-3	2-Butanone (MEK)	2500	2550	102	2490	100	2	70-130/25
104-51-8	n-Butylbenzene	2500	2810	112	2890	116	3	70-130/25
135-98-8	sec-Butylbenzene	2500	2850	114	2950	118	3	70-130/25
98-06-6	tert-Butylbenzene	2500	2920	117	3020	121	3	70-130/25
75-15-0	Carbon disulfide	2500	2770	111	2840	114	2	70-130/25
56-23-5	Carbon tetrachloride	2500	3190	128	3280	131* a	3	70-130/25
108-90-7	Chlorobenzene	2500	3020	121	3080	123	2	70-130/25
75-00-3	Chloroethane	2500	2430	97	2560	102	5	70-130/25
67-66-3	Chloroform	2500	2770	111	2820	113	2	70-130/25
74-87-3	Chloromethane	2500	2150	86	2180	87	1	70-130/25
95-49-8	o-Chlorotoluene	2500	2760	110	2880	115	4	70-130/25
106-43-4	p-Chlorotoluene	2500	2840	114	2930	117	3	70-130/25
108-20-3	Di-Isopropyl ether	2500	2400	96	2430	97	1	70-130/25
96-12-8	1,2-Dibromo-3-chloropropane	2500	2560	102	2590	104	1	70-130/25
124-48-1	Dibromochloromethane	2500	3250	130	3290	132* a	1	70-130/25
106-93-4	1,2-Dibromoethane	2500	2950	118	2960	118	0	70-130/25
95-50-1	1,2-Dichlorobenzene	2500	2920	117	2960	118	1	70-130/25
541-73-1	1,3-Dichlorobenzene	2500	2910	116	2970	119	2	70-130/25
106-46-7	1,4-Dichlorobenzene	2500	2900	116	2960	118	2	70-130/25
75-71-8	Dichlorodifluoromethane	2500	2700	108	2730	109	1	70-130/25
75-34-3	1,1-Dichloroethane	2500	2620	105	2670	107	2	70-130/25
107-06-2	1,2-Dichloroethane	2500	2860	114	2900	116	1	70-130/25
75-35-4	1,1-Dichloroethene	2500	2790	112	2860	114	2	70-130/25
156-59-2	cis-1,2-Dichloroethene	2500	2630	105	2690	108	2	70-130/25
156-60-5	trans-1,2-Dichloroethene	2500	2700	108	2800	112	4	70-130/25
78-87-5	1,2-Dichloropropane	2500	2600	104	2660	106	2	70-130/25
142-28-9	1,3-Dichloropropane	2500	2840	114	2840	114	0	70-130/25
594-20-7	2,2-Dichloropropane	2500	2950	118	3030	121	3	70-130/25
563-58-6	1,1-Dichloropropene	2500	2850	114	2960	118	4	70-130/25

Blank Spike/Blank Spike Duplicate Summary

Page 2 of 3

Job Number: M96257
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSR663-BS	R18608A.D	1	12/07/10	GK	n/a	n/a	MSR663
MSR663-BSD	R18609A.D	1	12/07/10	GK	n/a	n/a	MSR663

The QC reported here applies to the following samples:

Method: SW846 8260B

M96257-1, M96257-2, M96257-3, M96257-4, M96257-5, M96257-7

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
10061-01-5	cis-1,3-Dichloropropene	2500	2910	116	3010	120	3	70-130/25
10061-02-6	trans-1,3-Dichloropropene	2500	3200	128	3250	130	2	70-130/25
123-91-1	1,4-Dioxane	12500	11600	93	12700	102	9	70-130/25
60-29-7	Ethyl Ether	2500	2530	101	2570	103	2	70-130/25
100-41-4	Ethylbenzene	2500	2930	117	2990	120	2	70-130/25
87-68-3	Hexachlorobutadiene	2500	3290	132* a	3390	136* a	3	70-130/25
591-78-6	2-Hexanone	2500	2190	88	2070	83	6	70-130/25
98-82-8	Isopropylbenzene	2500	3290	132* a	3430	137* a	4	70-130/25
99-87-6	p-Isopropyltoluene	2500	2930	117	3010	120	3	70-130/25
1634-04-4	Methyl Tert Butyl Ether	2500	2550	102	2540	102	0	70-130/25
108-10-1	4-Methyl-2-pentanone (MIBK)	2500	2140	86	2170	87	1	70-130/25
74-95-3	Methylene bromide	2500	2900	116	2950	118	2	70-130/25
75-09-2	Methylene chloride	2500	2660	106	2760	110	4	70-130/25
91-20-3	Naphthalene	2500	2670	107	2740	110	3	70-130/25
103-65-1	n-Propylbenzene	2500	2790	112	2910	116	4	70-130/25
100-42-5	Styrene	2500	3080	123	3180	127	3	70-130/25
994-05-8	tert-Amyl Methyl Ether	2500	2640	106	2690	108	2	70-130/25
637-92-3	tert-Butyl Ethyl Ether	2500	2580	103	2590	104	0	70-130/25
630-20-6	1,1,1,2-Tetrachloroethane	2500	3190	128	3240	130	2	70-130/25
79-34-5	1,1,2,2-Tetrachloroethane	2500	2660	106	2690	108	1	70-130/25
127-18-4	Tetrachloroethene	2500	3210	128	3290	132* a	2	70-130/25
109-99-9	Tetrahydrofuran	2500	2080	83	2060	82	1	70-130/25
108-88-3	Toluene	2500	2800	112	2930	117	5	70-130/25
87-61-6	1,2,3-Trichlorobenzene	2500	2870	115	2930	117	2	70-130/25
120-82-1	1,2,4-Trichlorobenzene	2500	3000	120	3060	122	2	70-130/25
71-55-6	1,1,1-Trichloroethane	2500	3040	122	3100	124	2	70-130/25
79-00-5	1,1,2-Trichloroethane	2500	2690	108	2710	108	1	70-130/25
79-01-6	Trichloroethene	2500	2800	112	2910	116	4	70-130/25
75-69-4	Trichlorofluoromethane	2500	2980	119	3030	121	2	70-130/25
96-18-4	1,2,3-Trichloropropane	2500	2610	104	2690	108	3	70-130/25
95-63-6	1,2,4-Trimethylbenzene	2500	2890	116	2980	119	3	70-130/25
108-67-8	1,3,5-Trimethylbenzene	2500	2910	116	2980	119	2	70-130/25
75-01-4	Vinyl chloride	2500	2990	120	2920	117	2	70-130/25
	m,p-Xylene	5000	5920	118	6100	122	3	70-130/25
95-47-6	o-Xylene	2500	2960	118	3050	122	3	70-130/25
1330-20-7	Xylene (total)	7500	8880	118	9160	122	3	70-130/25

Blank Spike/Blank Spike Duplicate Summary

Page 3 of 3

Job Number: M96257

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSR663-BS	R18608A.D	1	12/07/10	GK	n/a	n/a	MSR663
MSR663-BSD	R18609A.D	1	12/07/10	GK	n/a	n/a	MSR663

The QC reported here applies to the following samples:

Method: SW846 8260B

M96257-1, M96257-2, M96257-3, M96257-4, M96257-5, M96257-7

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	114%	117%	70-130%
2037-26-5	Toluene-D8	113%	117%	70-130%
460-00-4	4-Bromofluorobenzene	111%	115%	70-130%

(a) Outside control limits. Blank Spike meets program technical requirements.

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 3

Job Number: M96257

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSR666-BS	R18669A.D	1	12/09/10	GK	n/a	n/a	MSR666
MSR666-BSD	R18670A.D	1	12/09/10	GK	n/a	n/a	MSR666

The QC reported here applies to the following samples:

Method: SW846 8260B

M96257-6, M96257-8, M96257-9

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	2500	2860	114	2810	112	2	70-130/25
71-43-2	Benzene	2500	2770	111	2660	106	4	70-130/25
108-86-1	Bromobenzene	2500	2970	119	2880	115	3	70-130/25
74-97-5	Bromochloromethane	2500	2840	114	2860	114	1	70-130/25
75-27-4	Bromodichloromethane	2500	2860	114	2810	112	2	70-130/25
75-25-2	Bromoform	2500	2860	114	2830	113	1	70-130/25
74-83-9	Bromomethane	2500	2480	99	2430	97	2	70-130/25
78-93-3	2-Butanone (MEK)	2500	2930	117	2800	112	5	70-130/25
104-51-8	n-Butylbenzene	2500	2840	114	2700	108	5	70-130/25
135-98-8	sec-Butylbenzene	2500	2950	118	2810	112	5	70-130/25
98-06-6	tert-Butylbenzene	2500	2920	117	2820	113	3	70-130/25
75-15-0	Carbon disulfide	2500	2860	114	2740	110	4	70-130/25
56-23-5	Carbon tetrachloride	2500	3010	120	2870	115	5	70-130/25
108-90-7	Chlorobenzene	2500	3080	123	2980	119	3	70-130/25
75-00-3	Chloroethane	2500	2480	99	2390	96	4	70-130/25
67-66-3	Chloroform	2500	2700	108	2610	104	3	70-130/25
74-87-3	Chloromethane	2500	2140	86	2110	84	1	70-130/25
95-49-8	o-Chlorotoluene	2500	2820	113	2720	109	4	70-130/25
106-43-4	p-Chlorotoluene	2500	2840	114	2760	110	3	70-130/25
108-20-3	Di-Isopropyl ether	2500	2360	94	2320	93	2	70-130/25
96-12-8	1,2-Dibromo-3-chloropropane	2500	2680	107	2700	108	1	70-130/25
124-48-1	Dibromochloromethane	2500	3200	128	3160	126	1	70-130/25
106-93-4	1,2-Dibromoethane	2500	3020	121	2940	118	3	70-130/25
95-50-1	1,2-Dichlorobenzene	2500	2930	117	2860	114	2	70-130/25
541-73-1	1,3-Dichlorobenzene	2500	2950	118	2860	114	3	70-130/25
106-46-7	1,4-Dichlorobenzene	2500	2900	116	2830	113	2	70-130/25
75-71-8	Dichlorodifluoromethane	2500	2550	102	2380	95	7	70-130/25
75-34-3	1,1-Dichloroethane	2500	2610	104	2560	102	2	70-130/25
107-06-2	1,2-Dichloroethane	2500	2750	110	2710	108	1	70-130/25
75-35-4	1,1-Dichloroethene	2500	2840	114	2750	110	3	70-130/25
156-59-2	cis-1,2-Dichloroethene	2500	2640	106	2570	103	3	70-130/25
156-60-5	trans-1,2-Dichloroethene	2500	2770	111	2710	108	2	70-130/25
78-87-5	1,2-Dichloropropane	2500	2630	105	2550	102	3	70-130/25
142-28-9	1,3-Dichloropropane	2500	2840	114	2790	112	2	70-130/25
594-20-7	2,2-Dichloropropane	2500	2840	114	2730	109	4	70-130/25
563-58-6	1,1-Dichloropropene	2500	2870	115	2790	112	3	70-130/25

Blank Spike/Blank Spike Duplicate Summary

Page 2 of 3

Job Number: M96257

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSR666-BS	R18669A.D	1	12/09/10	GK	n/a	n/a	MSR666
MSR666-BSD	R18670A.D	1	12/09/10	GK	n/a	n/a	MSR666

The QC reported here applies to the following samples:

Method: SW846 8260B

M96257-6, M96257-8, M96257-9

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
10061-01-5	cis-1,3-Dichloropropene	2500	2910	116	2880	115	1	70-130/25
10061-02-6	trans-1,3-Dichloropropene	2500	3180	127	3100	124	3	70-130/25
123-91-1	1,4-Dioxane	12500	13300	106	13100	105	2	70-130/25
60-29-7	Ethyl Ether	2500	2610	104	2560	102	2	70-130/25
100-41-4	Ethylbenzene	2500	2970	119	2860	114	4	70-130/25
87-68-3	Hexachlorobutadiene	2500	3160	126	3030	121	4	70-130/25
591-78-6	2-Hexanone	2500	2420	97	2460	98	2	70-130/25
98-82-8	Isopropylbenzene	2500	3390	136* a	3260	130	4	70-130/25
99-87-6	p-Isopropyltoluene	2500	2960	118	2840	114	4	70-130/25
1634-04-4	Methyl Tert Butyl Ether	2500	2590	104	2560	102	1	70-130/25
108-10-1	4-Methyl-2-pentanone (MIBK)	2500	2250	90	2260	90	0	70-130/25
74-95-3	Methylene bromide	2500	2840	114	2780	111	2	70-130/25
75-09-2	Methylene chloride	2500	2700	108	2670	107	1	70-130/25
91-20-3	Naphthalene	2500	2790	112	2760	110	1	70-130/25
103-65-1	n-Propylbenzene	2500	2860	114	2760	110	4	70-130/25
100-42-5	Styrene	2500	3180	127	3090	124	3	70-130/25
994-05-8	tert-Amyl Methyl Ether	2500	2690	108	2630	105	2	70-130/25
637-92-3	tert-Butyl Ethyl Ether	2500	2570	103	2540	102	1	70-130/25
630-20-6	1,1,1,2-Tetrachloroethane	2500	3130	125	3050	122	3	70-130/25
79-34-5	1,1,2,2-Tetrachloroethane	2500	2740	110	2680	107	2	70-130/25
127-18-4	Tetrachloroethene	2500	3270	131* a	3130	125	4	70-130/25
109-99-9	Tetrahydrofuran	2500	2220	89	2270	91	2	70-130/25
108-88-3	Toluene	2500	2830	113	2740	110	3	70-130/25
87-61-6	1,2,3-Trichlorobenzene	2500	2860	114	2810	112	2	70-130/25
120-82-1	1,2,4-Trichlorobenzene	2500	3020	121	2950	118	2	70-130/25
71-55-6	1,1,1-Trichloroethane	2500	2880	115	2770	111	4	70-130/25
79-00-5	1,1,2-Trichloroethane	2500	2720	109	2650	106	3	70-130/25
79-01-6	Trichloroethene	2500	2830	113	2710	108	4	70-130/25
75-69-4	Trichlorofluoromethane	2500	2840	114	2710	108	5	70-130/25
96-18-4	1,2,3-Trichloropropane	2500	2740	110	2710	108	1	70-130/25
95-63-6	1,2,4-Trimethylbenzene	2500	2930	117	2830	113	3	70-130/25
108-67-8	1,3,5-Trimethylbenzene	2500	2950	118	2840	114	4	70-130/25
75-01-4	Vinyl chloride	2500	2460	98	2210	88	11	70-130/25
	m,p-Xylene	5000	6060	121	5850	117	4	70-130/25
95-47-6	o-Xylene	2500	3010	120	2900	116	4	70-130/25
1330-20-7	Xylene (total)	7500	9070	121	8760	117	3	70-130/25

Blank Spike/Blank Spike Duplicate Summary

Page 3 of 3

Job Number: M96257

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSR666-BS	R18669A.D	1	12/09/10	GK	n/a	n/a	MSR666
MSR666-BSD	R18670A.D	1	12/09/10	GK	n/a	n/a	MSR666

The QC reported here applies to the following samples:

Method: SW846 8260B

M96257-6, M96257-8, M96257-9

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	108%	106%	70-130%
2037-26-5	Toluene-D8	111%	107%	70-130%
460-00-4	4-Bromofluorobenzene	111%	108%	70-130%

(a) Outside control limits. Blank Spike meets program technical requirements.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: M96257
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M96199-5MS	R18621.D	1	12/07/10	GK	n/a	n/a	MSR663
M96199-5MSD	R18622.D	1	12/07/10	GK	n/a	n/a	MSR663
M96199-5	R18620.D	1	12/07/10	GK	n/a	n/a	MSR663

The QC reported here applies to the following samples:

Method: SW846 8260B

M96257-1, M96257-2, M96257-3, M96257-4, M96257-5, M96257-7

CAS No.	Compound	M96199-5 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		2760	2090	76	1650	60* a	24	70-130/30
71-43-2	Benzene	20.4		2760	3010	108	3150	114	5	70-130/30
108-86-1	Bromobenzene	ND		2760	3100	112	3220	117	4	70-130/30
74-97-5	Bromochloromethane	ND		2760	2990	108	3140	114	5	70-130/30
75-27-4	Bromodichloromethane	ND		2760	3180	115	3250	118	2	70-130/30
75-25-2	Bromoform	ND		2760	3080	112	3130	114	2	70-130/30
74-83-9	Bromomethane	ND		2760	2820	102	2960	107	5	70-130/30
78-93-3	2-Butanone (MEK)	ND		2760	2390	87	2020	73	17	70-130/30
104-51-8	n-Butylbenzene	ND		2760	3030	110	3170	115	5	70-130/30
135-98-8	sec-Butylbenzene	ND		2760	3080	112	3250	118	5	70-130/30
98-06-6	tert-Butylbenzene	ND		2760	3130	114	3290	119	5	70-130/30
75-15-0	Carbon disulfide	ND		2760	2980	108	3210	116	7	70-130/30
56-23-5	Carbon tetrachloride	ND		2760	3510	127	3610	131* a	3	70-130/30
108-90-7	Chlorobenzene	ND		2760	3270	119	3380	123	3	70-130/30
75-00-3	Chloroethane	ND		2760	2730	99	2930	106	7	70-130/30
67-66-3	Chloroform	ND		2760	2990	108	3100	112	4	70-130/30
74-87-3	Chloromethane	ND		2760	2310	84	2560	93	10	70-130/30
95-49-8	o-Chlorotoluene	ND		2760	2980	108	3110	113	4	70-130/30
106-43-4	p-Chlorotoluene	ND		2760	3050	111	3180	115	4	70-130/30
108-20-3	Di-Isopropyl ether	ND		2760	2580	94	2690	98	4	70-130/30
96-12-8	1,2-Dibromo-3-chloropropane	ND		2760	2780	101	2840	103	2	70-130/30
124-48-1	Dibromochloromethane	ND		2760	3480	126	3530	128	1	70-130/30
106-93-4	1,2-Dibromoethane	ND		2760	3160	115	3240	118	3	70-130/30
95-50-1	1,2-Dichlorobenzene	ND		2760	3130	114	3230	117	3	70-130/30
541-73-1	1,3-Dichlorobenzene	ND		2760	3130	114	3240	118	3	70-130/30
106-46-7	1,4-Dichlorobenzene	ND		2760	3080	112	3230	117	5	70-130/30
75-71-8	Dichlorodifluoromethane	ND		2760	2900	105	3080	112	6	70-130/30
75-34-3	1,1-Dichloroethane	ND		2760	2840	103	2990	108	5	70-130/30
107-06-2	1,2-Dichloroethane	ND		2760	3100	112	3170	115	2	70-130/30
75-35-4	1,1-Dichloroethene	ND		2760	3010	109	3190	116	6	70-130/30
156-59-2	cis-1,2-Dichloroethene	ND		2760	2850	103	2980	108	4	70-130/30
156-60-5	trans-1,2-Dichloroethene	ND		2760	2930	106	3130	114	7	70-130/30
78-87-5	1,2-Dichloropropane	ND		2760	2820	102	2950	107	5	70-130/30
142-28-9	1,3-Dichloropropane	ND		2760	3040	110	3060	111	1	70-130/30
594-20-7	2,2-Dichloropropane	ND		2760	3140	114	3290	119	5	70-130/30
563-58-6	1,1-Dichloropropene	ND		2760	3110	113	3300	120	6	70-130/30

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 3

Job Number: M96257
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M96199-5MS	R18621.D	1	12/07/10	GK	n/a	n/a	MSR663
M96199-5MSD	R18622.D	1	12/07/10	GK	n/a	n/a	MSR663
M96199-5	R18620.D	1	12/07/10	GK	n/a	n/a	MSR663

The QC reported here applies to the following samples:

Method: SW846 8260B

M96257-1, M96257-2, M96257-3, M96257-4, M96257-5, M96257-7

CAS No.	Compound	M96199-5 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
10061-01-5	cis-1,3-Dichloropropene	ND	2760	3160	115	3250	118	3	70-130/30
10061-02-6	trans-1,3-Dichloropropene	ND	2760	3430	124	3520	128	3	70-130/30
123-91-1	1,4-Dioxane	ND	13800	12800	93	13400	97	5	70-130/30
60-29-7	Ethyl Ether	ND	2760	2700	98	2810	102	4	70-130/30
100-41-4	Ethylbenzene	ND	2760	3190	116	3290	119	3	70-130/30
87-68-3	Hexachlorobutadiene	ND	2760	3440	125	3650	132* a	6	70-130/30
591-78-6	2-Hexanone	ND	2760	2050	74	1790	65* a	14	70-130/30
98-82-8	Isopropylbenzene	ND	2760	3590	130	3780	137* a	5	70-130/30
99-87-6	p-Isopropyltoluene	ND	2760	3160	115	3310	120	5	70-130/30
1634-04-4	Methyl Tert Butyl Ether	ND	2760	2740	99	2840	103	4	70-130/30
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	2760	2300	83	2290	83	0	70-130/30
74-95-3	Methylene bromide	ND	2760	3100	112	3160	115	2	70-130/30
75-09-2	Methylene chloride	ND	2760	2910	106	3060	111	5	70-130/30
91-20-3	Naphthalene	136	2760	2820	97	3040	105	8	70-130/30
103-65-1	n-Propylbenzene	ND	2760	3020	110	3170	115	5	70-130/30
100-42-5	Styrene	ND	2760	3350	122	3450	125	3	70-130/30
994-05-8	tert-Amyl Methyl Ether	ND	2760	2850	103	2950	107	3	70-130/30
637-92-3	tert-Butyl Ethyl Ether	ND	2760	2790	101	2880	104	3	70-130/30
630-20-6	1,1,1,2-Tetrachloroethane	ND	2760	3460	126	3550	129	3	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	ND	2760	2830	103	2880	104	2	70-130/30
127-18-4	Tetrachloroethene	ND	2760	3470	126	3590	130	3	70-130/30
109-99-9	Tetrahydrofuran	ND	2760	2290	83	2270	82	1	70-130/30
108-88-3	Toluene	38.8	2760	3100	111	3230	116	4	70-130/30
87-61-6	1,2,3-Trichlorobenzene	ND	2760	2900	105	3130	114	8	70-130/30
120-82-1	1,2,4-Trichlorobenzene	ND	2760	3160	115	3320	120	5	70-130/30
71-55-6	1,1,1-Trichloroethane	ND	2760	3310	120	3440	125	4	70-130/30
79-00-5	1,1,2-Trichloroethane	ND	2760	2970	108	3000	109	1	70-130/30
79-01-6	Trichloroethene	ND	2760	3070	111	3260	118	6	70-130/30
75-69-4	Trichlorofluoromethane	ND	2760	3280	119	3390	123	3	70-130/30
96-18-4	1,2,3-Trichloropropane	ND	2760	2830	103	2860	104	1	70-130/30
95-63-6	1,2,4-Trimethylbenzene	ND	2760	3110	113	3240	118	4	70-130/30
108-67-8	1,3,5-Trimethylbenzene	ND	2760	3130	114	3270	119	4	70-130/30
75-01-4	Vinyl chloride	ND	2760	3610	131* a	3560	129	1	70-130/30
	m,p-Xylene	26.2	5510	6500	117	6730	122	3	70-130/30
95-47-6	o-Xylene	ND	2760	3270	119	3380	123	3	70-130/30
1330-20-7	Xylene (total)	26.2	8270	9760	118	10100	122	3	70-130/30

Matrix Spike/Matrix Spike Duplicate Summary

Page 3 of 3

Job Number: M96257

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M96199-5MS	R18621.D	1	12/07/10	GK	n/a	n/a	MSR663
M96199-5MSD	R18622.D	1	12/07/10	GK	n/a	n/a	MSR663
M96199-5	R18620.D	1	12/07/10	GK	n/a	n/a	MSR663

The QC reported here applies to the following samples:

Method: SW846 8260B

M96257-1, M96257-2, M96257-3, M96257-4, M96257-5, M96257-7

CAS No.	Surrogate Recoveries	MS	MSD	M96199-5	Limits
1868-53-7	Dibromofluoromethane	112%	118%	113%	70-130%
2037-26-5	Toluene-D8	112%	117%	111%	70-130%
460-00-4	4-Bromofluorobenzene	110%	113%	111%	70-130%

(a) Outside control limits due to possible matrix interference. Refer to Blank Spike.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: M96257

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M96257-6MS	R18688.D	1	12/09/10	GK	n/a	n/a	MSR666
M96257-6MSD	R18689.D	1	12/09/10	GK	n/a	n/a	MSR666
M96257-6	R18682.D	1	12/09/10	GK	n/a	n/a	MSR666

The QC reported here applies to the following samples:

Method: SW846 8260B

M96257-6, M96257-8, M96257-9

CAS No.	Compound	M96257-6 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		3590	2920	81	2920	81	0	70-130/30
71-43-2	Benzene	35.1		3590	4020	111	3940	109	2	70-130/30
108-86-1	Bromobenzene	ND		3590	4300	120	4340	121	1	70-130/30
74-97-5	Bromochloromethane	ND		3590	4070	113	4090	114	0	70-130/30
75-27-4	Bromodichloromethane	ND		3590	4120	115	4080	114	1	70-130/30
75-25-2	Bromoform	ND		3590	4230	118	4190	117	1	70-130/30
74-83-9	Bromomethane	ND		3590	3670	102	3590	100	2	70-130/30
78-93-3	2-Butanone (MEK)	ND		3590	3230	90	3170	88	2	70-130/30
104-51-8	n-Butylbenzene	ND		3590	4060	113	3990	111	2	70-130/30
135-98-8	sec-Butylbenzene	ND		3590	4190	117	4140	115	1	70-130/30
98-06-6	tert-Butylbenzene	ND		3590	4190	117	4180	116	0	70-130/30
75-15-0	Carbon disulfide	23.6		3590	4050	112	3950	109	3	70-130/30
56-23-5	Carbon tetrachloride	ND		3590	4380	122	4200	117	4	70-130/30
108-90-7	Chlorobenzene	ND		3590	4500	125	4400	122	2	70-130/30
75-00-3	Chloroethane	ND		3590	3530	98	3490	97	1	70-130/30
67-66-3	Chloroform	ND		3590	3810	106	3760	105	1	70-130/30
74-87-3	Chloromethane	ND		3590	2990	83	2920	81	2	70-130/30
95-49-8	o-Chlorotoluene	ND		3590	4060	113	4010	112	1	70-130/30
106-43-4	p-Chlorotoluene	ND		3590	4090	114	4080	114	0	70-130/30
108-20-3	Di-Isopropyl ether	ND		3590	3300	92	3320	92	1	70-130/30
96-12-8	1,2-Dibromo-3-chloropropane	ND		3590	3790	105	4010	112	6	70-130/30
124-48-1	Dibromochloromethane	ND		3590	4710	131* a	4740	132* a	1	70-130/30
106-93-4	1,2-Dibromoethane	ND		3590	4400	122	4400	122	0	70-130/30
95-50-1	1,2-Dichlorobenzene	ND		3590	4230	118	4260	119	1	70-130/30
541-73-1	1,3-Dichlorobenzene	ND		3590	4220	117	4250	118	1	70-130/30
106-46-7	1,4-Dichlorobenzene	ND		3590	4160	116	4170	116	0	70-130/30
75-71-8	Dichlorodifluoromethane	ND		3590	3480	97	3370	94	3	70-130/30
75-34-3	1,1-Dichloroethane	ND		3590	3730	104	3660	102	2	70-130/30
107-06-2	1,2-Dichloroethane	ND		3590	3890	108	3900	109	0	70-130/30
75-35-4	1,1-Dichloroethene	ND		3590	4090	114	3950	110	3	70-130/30
156-59-2	cis-1,2-Dichloroethene	ND		3590	3800	106	3760	105	1	70-130/30
156-60-5	trans-1,2-Dichloroethene	ND		3590	3930	109	3910	109	1	70-130/30
78-87-5	1,2-Dichloropropane	ND		3590	3860	107	3790	105	2	70-130/30
142-28-9	1,3-Dichloropropane	ND		3590	4060	113	4110	114	1	70-130/30
594-20-7	2,2-Dichloropropane	ND		3590	3750	104	3600	100	4	70-130/30
563-58-6	1,1-Dichloropropene	ND		3590	4230	118	4030	112	5	70-130/30

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 3

Job Number: M96257
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M96257-6MS	R18688.D	1	12/09/10	GK	n/a	n/a	MSR666
M96257-6MSD	R18689.D	1	12/09/10	GK	n/a	n/a	MSR666
M96257-6	R18682.D	1	12/09/10	GK	n/a	n/a	MSR666

The QC reported here applies to the following samples:

Method: SW846 8260B

M96257-6, M96257-8, M96257-9

CAS No.	Compound	M96257-6 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
10061-01-5	cis-1,3-Dichloropropene	ND		3590	4180	116	4090	114	2	70-130/30
10061-02-6	trans-1,3-Dichloropropene	ND		3590	4500	125	4480	125	0	70-130/30
123-91-1	1,4-Dioxane	ND		18000	20200	112	18000	100	12	70-130/30
60-29-7	Ethyl Ether	ND		3590	3580	100	3580	100	0	70-130/30
100-41-4	Ethylbenzene	21.8		3590	4350	120	4250	118	2	70-130/30
87-68-3	Hexachlorobutadiene	ND		3590	4700	131* a	4730	132* a	1	70-130/30
591-78-6	2-Hexanone	ND		3590	2480	69* a	2470	69* a	0	70-130/30
98-82-8	Isopropylbenzene	ND		3590	4930	137* a	4900	136* a	1	70-130/30
99-87-6	p-Isopropyltoluene	35.8		3590	4260	118	4230	117	1	70-130/30
1634-04-4	Methyl Tert Butyl Ether	ND		3590	3670	102	3700	103	1	70-130/30
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		3590	3220	90	3110	87	3	70-130/30
74-95-3	Methylene bromide	ND		3590	4060	113	4060	113	0	70-130/30
75-09-2	Methylene chloride	ND		3590	3860	107	3830	107	1	70-130/30
91-20-3	Naphthalene	2570		3590	7530	138* a	6900	120	9	70-130/30
103-65-1	n-Propylbenzene	ND		3590	4120	115	4060	113	1	70-130/30
100-42-5	Styrene	ND		3590	4710	131* a	4620	129	2	70-130/30
994-05-8	tert-Amyl Methyl Ether	ND		3590	3860	107	3880	108	1	70-130/30
637-92-3	tert-Butyl Ethyl Ether	ND		3590	3660	102	3640	101	1	70-130/30
630-20-6	1,1,1,2-Tetrachloroethane	ND		3590	4620	129	4480	125	3	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	ND		3590	3750	104	3780	105	1	70-130/30
127-18-4	Tetrachloroethene	ND		3590	4830	134* a	4640	129	4	70-130/30
109-99-9	Tetrahydrofuran	ND		3590	3210	89	3200	89	0	70-130/30
108-88-3	Toluene	47.1		3590	4140	114	4060	112	2	70-130/30
87-61-6	1,2,3-Trichlorobenzene	ND		3590	4000	111	4030	112	1	70-130/30
120-82-1	1,2,4-Trichlorobenzene	ND		3590	4240	118	4320	120	2	70-130/30
71-55-6	1,1,1-Trichloroethane	ND		3590	4090	114	4020	112	2	70-130/30
79-00-5	1,1,2-Trichloroethane	ND		3590	3950	110	3910	109	1	70-130/30
79-01-6	Trichloroethene	ND		3590	4260	119	4260	119	0	70-130/30
75-69-4	Trichlorofluoromethane	ND		3590	4030	112	3880	108	4	70-130/30
96-18-4	1,2,3-Trichloropropane	ND		3590	3850	107	3910	109	2	70-130/30
95-63-6	1,2,4-Trimethylbenzene	34.7		3590	4260	118	4220	116	1	70-130/30
108-67-8	1,3,5-Trimethylbenzene	26.5		3590	4270	118	4240	117	1	70-130/30
75-01-4	Vinyl chloride	ND		3590	3890	108	3880	108	0	70-130/30
	m,p-Xylene	67.2		7190	8870	122	8660	120	2	70-130/30
95-47-6	o-Xylene	23.6		3590	4440	123	4310	119	3	70-130/30
1330-20-7	Xylene (total)	90.8		10800	13300	123	13000	120	2	70-130/30

Matrix Spike/Matrix Spike Duplicate Summary

Page 3 of 3

Job Number: M96257

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M96257-6MS	R18688.D	1	12/09/10	GK	n/a	n/a	MSR666
M96257-6MSD	R18689.D	1	12/09/10	GK	n/a	n/a	MSR666
M96257-6	R18682.D	1	12/09/10	GK	n/a	n/a	MSR666

The QC reported here applies to the following samples:

Method: SW846 8260B

M96257-6, M96257-8, M96257-9

CAS No.	Surrogate Recoveries	MS	MSD	M96257-6	Limits
1868-53-7	Dibromofluoromethane	109%	106%	107%	70-130%
2037-26-5	Toluene-D8	113%	111%	111%	70-130%
460-00-4	4-Bromofluorobenzene	112%	112%	113%	70-130%

(a) Outside control limits due to possible matrix interference. Refer to Blank Spike.

Volatile Internal Standard Area Summary

Page 1 of 1

Job Number: M96257
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Check Std: MSR663-CC638
Lab File ID: R18607A.D
Instrument ID: GCMSR
Injection Date: 12/07/10
Injection Time: 11:42
Method: SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	245633	9.11	334396	9.98	163836	13.25	209360	15.81	57565	6.69
Upper Limit ^a	491266	9.61	668792	10.48	327672	13.75	418720	16.31	115130	7.19
Lower Limit ^b	122817	8.61	167198	9.48	81918	12.75	104680	15.31	28783	6.19

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSR663-BS	253675	9.11	349518	9.99	168530	13.25	215284	15.81	59624	6.69
MSR663-BSD	263012	9.11	358034	9.99	173848	13.25	219560	15.81	60013	6.69
MSR663-MB	242830	9.11	323578	9.99	149093	13.25	195619	15.81	57708	6.69
ZZZZZZ	241428	9.11	320487	9.99	149117	13.25	198728	15.81	58413	6.69
ZZZZZZ	242379	9.11	321117	9.99	149308	13.25	199531	15.81	57282	6.69
ZZZZZZ	248034	9.12	327937	9.99	152646	13.25	201398	15.81	60138	6.69
ZZZZZZ	244906	9.11	322125	9.99	152153	13.25	200450	15.81	62710	6.69
ZZZZZZ	255050	9.12	338140	9.99	155352	13.25	204976	15.81	59382	6.69
ZZZZZZ	257923	9.12	341496	9.99	157408	13.25	207045	15.81	58768	6.70
ZZZZZZ	252139	9.11	333503	9.99	156694	13.25	206389	15.81	57477	6.69
ZZZZZZ	255355	9.12	346440	9.99	160157	13.25	211754	15.81	58299	6.69
M96199-5	254353	9.11	343345	9.99	158674	13.25	204410	15.81	59499	6.69
M96199-5MS	256007	9.11	351908	9.99	170707	13.25	220648	15.81	58454	6.69
M96199-5MSD	262654	9.11	361449	9.98	175747	13.25	225201	15.81	61397	6.69
ZZZZZZ	242399	9.11	326304	9.99	157304	13.25	215343	15.81	60801	6.68
ZZZZZZ	248803	9.12	337716	9.99	160511	13.25	219898	15.81	61946	6.68
ZZZZZZ	265404	9.11	356400	9.99	166624	13.25	216708	15.81	66027	6.69
M96257-1	261529	9.11	350386	9.99	161029	13.25	210522	15.81	63374	6.69
M96257-4	254737	9.11	345434	9.99	157067	13.25	207079	15.81	62685	6.69
M96257-7	252366	9.11	339362	9.99	158197	13.25	208732	15.81	64542	6.69
M96257-5	254895	9.11	344973	9.99	161294	13.25	210656	15.81	64093	6.69
M96257-3	257016	9.11	340928	9.99	159441	13.25	208644	15.81	64093	6.69
ZZZZZZ	259611	9.11	349349	9.99	161216	13.25	214770	15.81	64838	6.69
M96257-2	46991 ^c	9.12	44006 ^c	10.00	25167 ^c	13.26	20151 ^c	15.82	1387 ^c	6.67

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Outside control limits due to possible matrix interference. Confirmed by reanalysis.

Volatile Internal Standard Area Summary

Page 1 of 2

Job Number: M96257
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Check Std: MSR666-CC638
Lab File ID: R18668A.D
Instrument ID: GCMSR
Injection Date: 12/09/10
Injection Time: 11:44
Method: SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	311163	9.11	429211	9.98	204434	13.25	260910	15.81	79157	6.69
Upper Limit ^a	622326	9.61	858422	10.48	408868	13.75	521820	16.31	158314	7.19
Lower Limit ^b	155582	8.61	214606	9.48	102217	12.75	130455	15.31	39579	6.19

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSR666-BS	315184	9.11	431067	9.98	205285	13.25	258619	15.81	79429	6.69
MSR665-BS	315184	9.11	431067	9.98	205285	13.25	258619	15.81	79429	6.69
MSR666-BSD	319323	9.11	441479	9.99	209655	13.25	263268	15.81	82194	6.69
MSR665-BSD	319323	9.11	441479	9.99	209655	13.25	263268	15.81	82194	6.69
MSR666-MB	307128	9.11	413264	9.99	185930	13.25	247941	15.81	78601	6.69
MSR665-MB	307128	9.11	413264	9.99	185930	13.25	247941	15.81	78601	6.69
ZZZZZZ	299938	9.11	405104	9.99	183268	13.25	249802	15.81	73855	6.69
ZZZZZZ	293863	9.11	399680	9.99	183439	13.25	238853	15.81	76082	6.68
ZZZZZZ	303627	9.11	406971	9.98	184327	13.25	238597	15.81	75530	6.71
M96257-8	290099	9.11	389305	9.99	178006	13.25	237344	15.81	75194	6.69
M96257-9	297028	9.11	398516	9.99	187487	13.25	249683	15.81	72311	6.69
ZZZZZZ	301704	9.11	405483	9.98	188417	13.25	246534	15.81	72904	6.68
ZZZZZZ	309940	9.11	417236	9.99	196701	13.25	257739	15.81	74090	6.69
ZZZZZZ	316033	9.11	427239	9.99	198244	13.25	260755	15.81	72868	6.68
M96257-6	318260	9.11	430043	9.99	197346	13.25	260403	15.81	80595	6.69
ZZZZZZ	310642	9.12	420167	9.99	192625	13.25	259135	15.81	75360	6.68
ZZZZZZ	304881	9.12	415218	9.99	190791	13.25	258708	15.81	75043	6.68
M96317-5	309127	9.12	416148	9.99	188424	13.25	258001	15.81	74300	6.68
M96317-5MS	316116	9.11	431809	9.99	204450	13.25	263631	15.81	76750	6.68
M96317-5MSD	311208	9.11	426019	9.98	204778	13.25	265133	15.81	78923	6.67
M96257-6MS	325926	9.11	440035	9.98	207574	13.24	265105	15.81	84862	6.69
M96257-6MSD	323236	9.11	439036	9.99	208017	13.25	260498	15.81	82257	6.69
ZZZZZZ	312582	9.11	420400	9.99	192613	13.25	254339	15.81	74927	6.69
ZZZZZZ	309797	9.11	418159	9.99	194534	13.25	255252	15.81	77765	6.69
M96257-2 ^c	41180 ^d	9.12	40799 ^d	10.00	22587 ^d	13.27	13505 ^d	15.82	918 ^d	6.67

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.

(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

(c) Confirmation run for surrogate recoveries.

Volatile Internal Standard Area Summary

Job Number: M96257
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Check Std:	MSR666-CC638	Injection Date:	12/09/10
Lab File ID:	R18668A.D	Injection Time:	11:44
Instrument ID:	GCMSR	Method:	SW846 8260B

Lab	IS 1		IS 2		IS 3		IS 4		IS 5	
Sample ID	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT

(d) Outside control limits due to possible matrix interference. Confirmed by reanalysis.

5.4.2
 5

Volatile Internal Standard Area Summary

Page 1 of 2

Job Number: M96257
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Check Std: MSR665-CC637
Lab File ID: R18668.D
Instrument ID: GCMSR
Injection Date: 12/09/10
Injection Time: 11:44
Method: SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	311163	9.11	429211	9.98	204434	13.25	260910	15.81	79157	6.69
Upper Limit ^a	622326	9.61	858422	10.48	408868	13.75	521820	16.31	158314	7.19
Lower Limit ^b	155582	8.61	214606	9.48	102217	12.75	130455	15.31	39579	6.19

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSR666-BS	315184	9.11	431067	9.98	205285	13.25	258619	15.81	79429	6.69
MSR665-BS	315184	9.11	431067	9.98	205285	13.25	258619	15.81	79429	6.69
MSR666-BSD	319323	9.11	441479	9.99	209655	13.25	263268	15.81	82194	6.69
MSR665-BSD	319323	9.11	441479	9.99	209655	13.25	263268	15.81	82194	6.69
MSR666-MB	307128	9.11	413264	9.99	185930	13.25	247941	15.81	78601	6.69
MSR665-MB	307128	9.11	413264	9.99	185930	13.25	247941	15.81	78601	6.69
ZZZZZZ	299938	9.11	405104	9.99	183268	13.25	249802	15.81	73855	6.69
ZZZZZZ	293863	9.11	399680	9.99	183439	13.25	238853	15.81	76082	6.68
ZZZZZZ	303627	9.11	406971	9.98	184327	13.25	238597	15.81	75530	6.71
M96257-8	290099	9.11	389305	9.99	178006	13.25	237344	15.81	75194	6.69
M96257-9	297028	9.11	398516	9.99	187487	13.25	249683	15.81	72311	6.69
ZZZZZZ	301704	9.11	405483	9.98	188417	13.25	246534	15.81	72904	6.68
ZZZZZZ	309940	9.11	417236	9.99	196701	13.25	257739	15.81	74090	6.69
ZZZZZZ	316033	9.11	427239	9.99	198244	13.25	260755	15.81	72868	6.68
M96257-6	318260	9.11	430043	9.99	197346	13.25	260403	15.81	80595	6.69
ZZZZZZ	310642	9.12	420167	9.99	192625	13.25	259135	15.81	75360	6.68
ZZZZZZ	304881	9.12	415218	9.99	190791	13.25	258708	15.81	75043	6.68
M96317-5	309127	9.12	416148	9.99	188424	13.25	258001	15.81	74300	6.68
M96317-5MS	316116	9.11	431809	9.99	204450	13.25	263631	15.81	76750	6.68
M96317-5MSD	311208	9.11	426019	9.98	204778	13.25	265133	15.81	78923	6.67
M96257-6MS	325926	9.11	440035	9.98	207574	13.24	265105	15.81	84862	6.69
M96257-6MSD	323236	9.11	439036	9.99	208017	13.25	260498	15.81	82257	6.69
ZZZZZZ	312582	9.11	420400	9.99	192613	13.25	254339	15.81	74927	6.69
ZZZZZZ	309797	9.11	418159	9.99	194534	13.25	255252	15.81	77765	6.69
M96257-2 ^c	41180 ^d	9.12	40799 ^d	10.00	22587 ^d	13.27	13505 ^d	15.82	918 ^d	6.67

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.

(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

(c) Confirmation run for surrogate recoveries.

Volatile Internal Standard Area Summary

Job Number: M96257
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Check Std:	MSR665-CC637	Injection Date:	12/09/10
Lab File ID:	R18668.D	Injection Time:	11:44
Instrument ID:	GCMSR	Method:	SW846 8260B

Lab	IS 1		IS 2		IS 3		IS 4		IS 5	
Sample ID	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT

(d) Outside control limits due to possible matrix interference. Confirmed by reanalysis.

5.4.3
 5

Volatile Surrogate Recovery Summary

Page 1 of 1

Job Number: M96257

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Method: SW846 8260B

Matrix: SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
M96257-1	R18627.D	106.0	107.0	104.0
M96257-2	R18693.D	14.0* a	100.0	120.0
M96257-2	R18633.D	18.0* a	116.0	94.0
M96257-3	R18631.D	112.0	113.0	105.0
M96257-4	R18628.D	114.0	112.0	111.0
M96257-5	R18630.D	103.0	112.0	112.0
M96257-6	R18682.D	107.0	111.0	113.0
M96257-7	R18629.D	112.0	113.0	110.0
M96257-8	R18676.D	107.0	108.0	107.0
M96257-9	R18677.D	107.0	112.0	109.0
M96199-5MS	R18621.D	112.0	112.0	110.0
M96199-5MSD	R18622.D	118.0	117.0	113.0
M96257-6MS	R18688.D	109.0	113.0	112.0
M96257-6MSD	R18689.D	106.0	111.0	112.0
MSR663-BS	R18608A.D	114.0	113.0	111.0
MSR663-BSD	R18609A.D	117.0	117.0	115.0
MSR663-MB	R18611A.D	114.0	114.0	111.0
MSR666-BS	R18669A.D	108.0	111.0	111.0
MSR666-BSD	R18670A.D	106.0	107.0	108.0
MSR666-MB	R18672A.D	104.0	107.0	105.0

Surrogate Compounds

Recovery Limits

S1 = Dibromofluoromethane

70-130%

S2 = Toluene-D8

70-130%

S3 = 4-Bromofluorobenzene

70-130%

(a) Outside control limits due to possible matrix interference. Confirmed by reanalysis.

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Page 1 of 2

Job Number: M96257
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23538-MB	S19958.D	1	12/13/10	PR	12/06/10	OP23538	MSS826

The QC reported here applies to the following samples:

Method: SW846 8270C

M96257-1, M96257-2, M96257-3, M96257-4, M96257-5, M96257-6, M96257-7, M96257-8, M96257-9

CAS No.	Compound	Result	RL	Units	Q
65-85-0	Benzoic acid	ND	480	ug/kg	
95-57-8	2-Chlorophenol	ND	240	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	480	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	480	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	480	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	960	ug/kg	
95-48-7	2-Methylphenol	ND	480	ug/kg	
	3&4-Methylphenol	ND	480	ug/kg	
88-75-5	2-Nitrophenol	ND	480	ug/kg	
100-02-7	4-Nitrophenol	ND	960	ug/kg	
87-86-5	Pentachlorophenol	ND	480	ug/kg	
108-95-2	Phenol	ND	240	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	480	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	480	ug/kg	
83-32-9	Acenaphthene	ND	240	ug/kg	
208-96-8	Acenaphthylene	ND	240	ug/kg	
98-86-2	Acetophenone	ND	480	ug/kg	
62-53-3	Aniline	ND	480	ug/kg	
120-12-7	Anthracene	ND	240	ug/kg	
56-55-3	Benzo(a)anthracene	ND	240	ug/kg	
50-32-8	Benzo(a)pyrene	ND	240	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	240	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	240	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	240	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	240	ug/kg	
85-68-7	Butyl benzyl phthalate	13.7	240	ug/kg	J
91-58-7	2-Chloronaphthalene	ND	240	ug/kg	
106-47-8	4-Chloroaniline	ND	480	ug/kg	
218-01-9	Chrysene	ND	240	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	240	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	240	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	240	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	240	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	240	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	240	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	240	ug/kg	

Method Blank Summary

Page 2 of 2

Job Number: M96257
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23538-MB	S19958.D	1	12/13/10	PR	12/06/10	OP23538	MSS826

The QC reported here applies to the following samples:

Method: SW846 8270C

M96257-1, M96257-2, M96257-3, M96257-4, M96257-5, M96257-6, M96257-7, M96257-8, M96257-9

CAS No.	Compound	Result	RL	Units	Q
121-14-2	2,4-Dinitrotoluene	ND	480	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	480	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	240	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	240	ug/kg	
132-64-9	Dibenzofuran	ND	240	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	240	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	240	ug/kg	
84-66-2	Diethyl phthalate	ND	240	ug/kg	
131-11-3	Dimethyl phthalate	ND	240	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	101	240	ug/kg	J
206-44-0	Fluoranthene	ND	240	ug/kg	
86-73-7	Fluorene	ND	240	ug/kg	
118-74-1	Hexachlorobenzene	ND	240	ug/kg	
87-68-3	Hexachlorobutadiene	ND	240	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	480	ug/kg	
67-72-1	Hexachloroethane	ND	240	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	240	ug/kg	
78-59-1	Isophorone	ND	240	ug/kg	
91-57-6	2-Methylnaphthalene	ND	240	ug/kg	
91-20-3	Naphthalene	ND	240	ug/kg	
98-95-3	Nitrobenzene	ND	240	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	240	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	240	ug/kg	
85-01-8	Phenanthrene	ND	240	ug/kg	
129-00-0	Pyrene	ND	240	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	240	ug/kg	

CAS No.	Surrogate Recoveries	Limits
367-12-4	2-Fluorophenol	81% 30-130%
4165-62-2	Phenol-d5	78% 30-130%
118-79-6	2,4,6-Tribromophenol	93% 30-130%
4165-60-0	Nitrobenzene-d5	79% 30-130%
321-60-8	2-Fluorobiphenyl	91% 30-130%
1718-51-0	Terphenyl-d14	106% 30-130%

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 3

Job Number: M96257

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23538-BS	S19959.D	1	12/13/10	PR	12/06/10	OP23538	MSS826
OP23538-BSD	S19960.D	1	12/13/10	PR	12/06/10	OP23538	MSS826

The QC reported here applies to the following samples:

Method: SW846 8270C

M96257-1, M96257-2, M96257-3, M96257-4, M96257-5, M96257-6, M96257-7, M96257-8, M96257-9

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic acid	4870	3100	64	3140	64	1	30-130/30
95-57-8	2-Chlorophenol	4870	3700	76	3600	73	3	30-130/30
59-50-7	4-Chloro-3-methyl phenol	4870	3860	79	3880	79	1	30-130/30
120-83-2	2,4-Dichlorophenol	4870	4170	86	4200	86	1	30-130/30
105-67-9	2,4-Dimethylphenol	4870	3580	73	3560	73	1	30-130/30
51-28-5	2,4-Dinitrophenol	4870	3370	69	2990	61	12	30-130/30
95-48-7	2-Methylphenol	4870	3570	73	3520	72	1	30-130/30
	3&4-Methylphenol	9750	9550	98	9340	95	2	30-130/30
88-75-5	2-Nitrophenol	4870	4010	82	4050	82	1	30-130/30
100-02-7	4-Nitrophenol	4870	3370	69	3370	69	0	30-130/30
87-86-5	Pentachlorophenol	4870	3270	67	3160	64	3	30-130/30
108-95-2	Phenol	4870	3700	76	3660	75	1	30-130/30
95-95-4	2,4,5-Trichlorophenol	4870	4140	85	4230	86	2	30-130/30
88-06-2	2,4,6-Trichlorophenol	4870	4360	89	4360	89	0	30-130/30
83-32-9	Acenaphthene	2440	2020	83	2010	82	0	40-140/30
208-96-8	Acenaphthylene	2440	1500	62	1490	61	1	40-140/30
98-86-2	Acetophenone	2440	3520	144* a	3440	140	2	40-140/30
62-53-3	Aniline	2440	1380	57	1350	55	2	40-140/30
120-12-7	Anthracene	2440	2070	85	2070	84	0	40-140/30
56-55-3	Benzo(a)anthracene	2440	2210	91	2260	92	2	40-140/30
50-32-8	Benzo(a)pyrene	2440	2070	85	2050	84	1	40-140/30
205-99-2	Benzo(b)fluoranthene	2440	2050	84	2070	84	1	40-140/30
191-24-2	Benzo(g,h,i)perylene	2440	2040	84	2080	85	2	40-140/30
207-08-9	Benzo(k)fluoranthene	2440	2300	94	2240	91	3	40-140/30
101-55-3	4-Bromophenyl phenyl ether	2440	2180	89	2170	88	0	40-140/30
85-68-7	Butyl benzyl phthalate	2440	2060	85	2090	85	1	40-140/30
91-58-7	2-Chloronaphthalene	2440	2050	84	2050	84	0	40-140/30
106-47-8	4-Chloroaniline	2440	1530	63	1530	62	0	40-140/30
218-01-9	Chrysene	2440	2220	91	2210	90	0	40-140/30
111-91-1	bis(2-Chloroethoxy)methane	2440	1840	76	1860	76	1	40-140/30
111-44-4	bis(2-Chloroethyl)ether	2440	1780	73	1680	68	6	40-140/30
108-60-1	bis(2-Chloroisopropyl)ether	2440	1690	69	1630	66	4	40-140/30
95-50-1	1,2-Dichlorobenzene	2440	1820	75	1760	72	3	40-140/30
122-66-7	1,2-Diphenylhydrazine	2440	1830	75	1820	74	1	40-140/30
541-73-1	1,3-Dichlorobenzene	2440	1790	73	1750	71	2	40-140/30
106-46-7	1,4-Dichlorobenzene	2440	1760	72	1730	70	2	40-140/30

Blank Spike/Blank Spike Duplicate Summary

Page 2 of 3

Job Number: M96257
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23538-BS	S19959.D	1	12/13/10	PR	12/06/10	OP23538	MSS826
OP23538-BSD	S19960.D	1	12/13/10	PR	12/06/10	OP23538	MSS826

The QC reported here applies to the following samples:

Method: SW846 8270C

M96257-1, M96257-2, M96257-3, M96257-4, M96257-5, M96257-6, M96257-7, M96257-8, M96257-9

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
121-14-2	2,4-Dinitrotoluene	2440	2090	86	2080	85	0	40-140/30
606-20-2	2,6-Dinitrotoluene	2440	2050	84	2030	83	1	40-140/30
91-94-1	3,3'-Dichlorobenzidine	2440	1720	71	1740	71	1	40-140/30
53-70-3	Dibenzo(a,h)anthracene	2440	2140	88	2170	88	1	40-140/30
132-64-9	Dibenzofuran	2440	1950	80	1910	78	2	40-140/30
84-74-2	Di-n-butyl phthalate	2440	2030	83	2020	82	0	40-140/30
117-84-0	Di-n-octyl phthalate	2440	2310	95	2300	94	0	40-140/30
84-66-2	Diethyl phthalate	2440	2070	85	2030	83	2	40-140/30
131-11-3	Dimethyl phthalate	2440	2070	85	2060	84	0	40-140/30
117-81-7	bis(2-Ethylhexyl)phthalate	2440	2120	87	2110	86	0	40-140/30
206-44-0	Fluoranthene	2440	2050	84	2030	83	1	40-140/30
86-73-7	Fluorene	2440	2120	87	2090	85	1	40-140/30
118-74-1	Hexachlorobenzene	2440	2170	89	2150	88	1	40-140/30
87-68-3	Hexachlorobutadiene	2440	1940	80	1950	79	1	40-140/30
77-47-4	Hexachlorocyclopentadiene	2440	1190	49	1190	48	0	40-140/30
67-72-1	Hexachloroethane	2440	1690	69	1670	68	1	40-140/30
193-39-5	Indeno(1,2,3-cd)pyrene	2440	2190	90	2220	90	1	40-140/30
78-59-1	Isophorone	2440	1770	73	1770	72	0	40-140/30
91-57-6	2-Methylnaphthalene	2440	1900	78	1900	77	0	40-140/30
91-20-3	Naphthalene	2440	1920	79	1940	79	1	40-140/30
98-95-3	Nitrobenzene	2440	1740	71	1750	71	1	40-140/30
621-64-7	N-Nitroso-di-n-propylamine	2440	1830	75	1780	73	3	40-140/30
86-30-6	N-Nitrosodiphenylamine	2440	2130	87	2140	87	0	40-140/30
85-01-8	Phenanthrene	2440	1970	81	1950	79	1	40-140/30
129-00-0	Pyrene	2440	2170	89	2220	90	2	40-140/30
120-82-1	1,2,4-Trichlorobenzene	2440	1970	81	1960	80	1	40-140/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	74%	71%	30-130%
4165-62-2	Phenol-d5	73%	69%	30-130%
118-79-6	2,4,6-Tribromophenol	90%	88%	30-130%
4165-60-0	Nitrobenzene-d5	72%	72%	30-130%
321-60-8	2-Fluorobiphenyl	85%	85%	30-130%
1718-51-0	Terphenyl-d14	92%	90%	30-130%

Blank Spike/Blank Spike Duplicate Summary

Page 3 of 3

Job Number: M96257

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23538-BS	S19959.D	1	12/13/10	PR	12/06/10	OP23538	MSS826
OP23538-BSD	S19960.D	1	12/13/10	PR	12/06/10	OP23538	MSS826

The QC reported here applies to the following samples:

Method: SW846 8270C

M96257-1, M96257-2, M96257-3, M96257-4, M96257-5, M96257-6, M96257-7, M96257-8, M96257-9

(a) Outside control limits. Associated samples are non-detect for this compound.

Matrix Spike Summary

Page 1 of 3

Job Number: M96257
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23538-MS	S19961.D	1	12/13/10	PR	12/06/10	OP23538	MSS826
M96289-4	S19975.D	1	12/13/10	PR	12/06/10	OP23538	MSS826

The QC reported here applies to the following samples:

Method: SW846 8270C

M96257-1, M96257-2, M96257-3, M96257-4, M96257-5, M96257-6, M96257-7, M96257-8, M96257-9

CAS No.	Compound	M96289-4 ug/kg	Spike Q	ug/kg	MS ug/kg	MS %	Limits
65-85-0	Benzoic acid	ND		5430	655	12* a	30-130
95-57-8	2-Chlorophenol	ND		5430	3510	65	30-130
59-50-7	4-Chloro-3-methyl phenol	ND		5430	3800	70	30-130
120-83-2	2,4-Dichlorophenol	ND		5430	3620	67	30-130
105-67-9	2,4-Dimethylphenol	ND		5430	3670	68	30-130
51-28-5	2,4-Dinitrophenol	ND		5430	ND	0* a	30-130
95-48-7	2-Methylphenol	52.1		5430	3670	67	30-130
	3&4-Methylphenol	262		10900	9910	89	30-130
88-75-5	2-Nitrophenol	ND		5430	3530	65	30-130
100-02-7	4-Nitrophenol	ND		5430	2460	45	30-130
87-86-5	Pentachlorophenol	ND		5430	978	18* a	30-130
108-95-2	Phenol	ND		5430	3690	68	30-130
95-95-4	2,4,5-Trichlorophenol	ND		5430	3230	59	30-130
88-06-2	2,4,6-Trichlorophenol	ND		5430	3410	63	30-130
83-32-9	Acenaphthene	537		2720	2980	90	40-140
208-96-8	Acenaphthylene	740		2720	2060	49	40-140
98-86-2	Acetophenone	25.3		2720	3730	136	40-140
62-53-3	Aniline	ND		2720	1090	40	40-140
120-12-7	Anthracene	2550		2720	5610	113	40-140
56-55-3	Benzo(a)anthracene	7540		2720	9820	84	40-140
50-32-8	Benzo(a)pyrene	5800		2720	7220	52	40-140
205-99-2	Benzo(b)fluoranthene	4340		2720	6150	67	40-140
191-24-2	Benzo(g,h,i)perylene	2700		2720	6040	123	40-140
207-08-9	Benzo(k)fluoranthene	4240		2720	5610	50	40-140
101-55-3	4-Bromophenyl phenyl ether	ND		2720	2160	80	40-140
85-68-7	Butyl benzyl phthalate	ND		2720	2220	82	40-140
91-58-7	2-Chloronaphthalene	ND		2720	2000	74	40-140
106-47-8	4-Chloroaniline	ND		2720	1550	57	40-140
218-01-9	Chrysene	6590		2720	8960	87	40-140
111-91-1	bis(2-Chloroethoxy)methane	ND		2720	1810	67	40-140
111-44-4	bis(2-Chloroethyl)ether	ND		2720	1880	69	40-140
108-60-1	bis(2-Chloroisopropyl)ether	ND		2720	1770	65	40-140
95-50-1	1,2-Dichlorobenzene	ND		2720	1850	68	40-140
122-66-7	1,2-Diphenylhydrazine	ND		2720	1810	67	40-140
541-73-1	1,3-Dichlorobenzene	ND		2720	1810	67	40-140
106-46-7	1,4-Dichlorobenzene	ND		2720	1780	66	40-140

Matrix Spike Summary

Job Number: M96257
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23538-MS	S19961.D	1	12/13/10	PR	12/06/10	OP23538	MSS826
M96289-4	S19975.D	1	12/13/10	PR	12/06/10	OP23538	MSS826

The QC reported here applies to the following samples:

Method: SW846 8270C

M96257-1, M96257-2, M96257-3, M96257-4, M96257-5, M96257-6, M96257-7, M96257-8, M96257-9

CAS No.	Compound	M96289-4 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Limits
121-14-2	2,4-Dinitrotoluene	ND		2720	1920	71	40-140
606-20-2	2,6-Dinitrotoluene	ND		2720	1970	73	40-140
91-94-1	3,3'-Dichlorobenzidine	ND		2720	1740	64	40-140
53-70-3	Dibenzo(a,h)anthracene	1450		2720	4060	96	40-140
132-64-9	Dibenzofuran	571		2720	2850	84	40-140
84-74-2	Di-n-butyl phthalate	ND		2720	2060	76	40-140
117-84-0	Di-n-octyl phthalate	ND		2720	1950	72	40-140
84-66-2	Diethyl phthalate	ND		2720	2010	74	40-140
131-11-3	Dimethyl phthalate	ND		2720	1960	72	40-140
117-81-7	bis(2-Ethylhexyl)phthalate	76.7		2720	2340	83	40-140
206-44-0	Fluoranthene	10700		2720	13800	114	40-140
86-73-7	Fluorene	902		2720	3490	95	40-140
118-74-1	Hexachlorobenzene	ND		2720	2120	78	40-140
87-68-3	Hexachlorobutadiene	ND		2720	1990	73	40-140
77-47-4	Hexachlorocyclopentadiene	ND		2720	614	23* a	40-140
67-72-1	Hexachloroethane	ND		2720	1780	66	40-140
193-39-5	Indeno(1,2,3-cd)pyrene	2900		2720	5920	111	40-140
78-59-1	Isophorone	ND		2720	1750	64	40-140
91-57-6	2-Methylnaphthalene	299		2720	2380	77	40-140
91-20-3	Naphthalene	662		2720	2730	76	40-140
98-95-3	Nitrobenzene	ND		2720	1720	63	40-140
621-64-7	N-Nitroso-di-n-propylamine	ND		2720	1950	72	40-140
86-30-6	N-Nitrosodiphenylamine	ND		2720	2250	83	40-140
85-01-8	Phenanthrene	6180		2720	11600	200* b	40-140
129-00-0	Pyrene	9050		2720	13200	153* b	40-140
120-82-1	1,2,4-Trichlorobenzene	ND		2720	1960	72	40-140

CAS No.	Surrogate Recoveries	MS	M96289-4	Limits
367-12-4	2-Fluorophenol	60%	59%	30-130%
4165-62-2	Phenol-d5	62%	61%	30-130%
118-79-6	2,4,6-Tribromophenol	67%	66%	30-130%
4165-60-0	Nitrobenzene-d5	64%	63%	30-130%
321-60-8	2-Fluorobiphenyl	74%	73%	30-130%
1718-51-0	Terphenyl-d14	84%	72%	30-130%

Matrix Spike Summary

Page 3 of 3

Job Number: M96257
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23538-MS	S19961.D	1	12/13/10	PR	12/06/10	OP23538	MSS826
M96289-4	S19975.D	1	12/13/10	PR	12/06/10	OP23538	MSS826

The QC reported here applies to the following samples:

Method: SW846 8270C

M96257-1, M96257-2, M96257-3, M96257-4, M96257-5, M96257-6, M96257-7, M96257-8, M96257-9

- (a) Outside control limits due to possible matrix interference. Refer to Blank Spike.
- (b) Outside control limits due to high level in sample relative to spike amount.

Semivolatile Internal Standard Area Summary

Page 1 of 1

Job Number: M96257
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Check Std: MSS826-CC822	Injection Date: 12/13/10
Lab File ID: S19952.D	Injection Time: 11:46
Instrument ID: GCMSS	Method: SW846 8270C

	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Check Std	218593	6.03	856118	7.40	415984	9.63	642010	11.84	611386	16.21	576931	18.44
Upper Limit ^a	437186	6.53	1712236	7.90	831968	10.13	1284020	12.34	1222772	16.71	1153862	18.94
Lower Limit ^b	109297	5.53	428059	6.90	207992	9.13	321005	11.34	305693	15.71	288466	17.94

Lab Sample ID	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
M95727-18R	253155	6.03	1033434	7.40	509342	9.63	779482	11.84	676573	16.20	632061	18.44
OP23575-LB	268236	6.03	1092315	7.40	527191	9.63	807422	11.84	700043	16.20	651661	18.44
OP23539-MS	228486	6.03	950874	7.40	455468	9.63	686679	11.84	599528	16.20	592392	18.44
OP23539-MSD	223064	6.03	943654	7.40	449794	9.63	697178	11.84	602191	16.20	588296	18.44
OP23538-MB	296654	6.03	1207985	7.40	589630	9.63	863756	11.84	706856	16.20	607635	18.44
OP23538-BS	290714	6.04	1143012	7.40	546797	9.63	835725	11.85	714481	16.20	613248	18.44
OP23538-BSD	266967	6.04	1020014	7.40	487989	9.63	741936	11.85	629424	16.20	545823	18.44
OP23538-MS	208816	6.04	874854	7.40	443125	9.63	661758	11.85	536045	16.22	593353	18.46
M96257-1	273180	6.04	1113488	7.40	531230	9.63	754381	11.85	599834	16.21	632022	18.45
M96257-2	225199	6.03	946882	7.40	462675	9.63	702612	11.84	606601	16.22	691106	18.46
M96257-3	299266	6.04	1234710	7.40	570721	9.63	795647	11.84	629394	16.21	702738	18.45
M96257-4	297067	6.04	1247347	7.40	607422	9.63	891503	11.84	664830	16.20	702269	18.44
M96257-5	270917	6.04	1113683	7.40	537969	9.63	773134	11.84	591541	16.21	696203	18.45
M96257-6	272963	6.03	1136767	7.40	535584	9.63	761166	11.84	607855	16.21	706579	18.45
M96257-7	267760	6.03	1087650	7.40	514509	9.63	717723	11.84	618555	16.21	760821	18.46
M96257-8	277246	6.04	1100917	7.40	505804	9.63	708218	11.85	633430	16.22	815021	18.46
M96257-9	241511	6.03	994088	7.40	479296	9.63	720484	11.84	714946	16.21	809292	18.45
ZZZZZZ	217783	6.04	763338	7.41	327673	9.65	520832	11.84	512308	16.22	649713	18.46
ZZZZZZ	300527	6.03	1107994	7.40	466622	9.63	704549	11.85	690055	16.23	936365	18.48
ZZZZZZ	268370	6.04	1084324	7.40	521379	9.63	745548	11.85	726593	16.22	961904	18.46
M96289-4	246588	6.04	1036194	7.40	512497	9.63	773685	11.84	691352	16.22	864115	18.47
M96317-5	238584	6.03	986228	7.40	485782	9.63	753991	11.84	734680	16.21	837998	18.45

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Surrogate Recovery Summary

Page 1 of 1

Job Number: M96257

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Method: SW846 8270C

Matrix: SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
M96257-1	S19963.D	62.0	62.0	77.0	63.0	75.0	81.0
M96257-2	S19964.D	61.0	60.0	59.0	58.0	70.0	78.0
M96257-3	S19965.D	67.0	66.0	85.0	65.0	77.0	81.0
M96257-4	S19966.D	59.0	62.0	68.0	64.0	73.0	84.0
M96257-5	S19967.D	62.0	61.0	74.0	62.0	72.0	75.0
M96257-6	S19968.D	38.0	37.0	46.0	35.0	41.0	45.0
M96257-7	S19969.D	60.0	59.0	70.0	60.0	68.0	65.0
M96257-8	S19970.D	64.0	63.0	81.0	67.0	77.0	73.0
M96257-9	S19971.D	66.0	61.0	70.0	63.0	81.0	78.0
OP23538-BS	S19959.D	74.0	73.0	90.0	72.0	85.0	92.0
OP23538-BSD	S19960.D	71.0	69.0	88.0	72.0	85.0	90.0
OP23538-MB	S19958.D	81.0	78.0	93.0	79.0	91.0	106.0
OP23538-MS	S19961.D	60.0	62.0	67.0	64.0	74.0	84.0

Surrogate Compounds

Recovery Limits

S1 = 2-Fluorophenol	30-130%
S2 = Phenol-d5	30-130%
S3 = 2,4,6-Tribromophenol	30-130%
S4 = Nitrobenzene-d5	30-130%
S5 = 2-Fluorobiphenyl	30-130%
S6 = Terphenyl-d14	30-130%

6.5.1

6

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Page 1 of 1

Job Number: M96257

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GBH929-MB	BH17817.D	1	12/07/10	WS	n/a	n/a	GBH929

The QC reported here applies to the following samples:

Method: MADEP VPH REV 1.1

M96257-1, M96257-2, M96257-3, M96257-4, M96257-5, M96257-6, M96257-7, M96257-8, M96257-9

CAS No.	Compound	Result	RL	Units	Q
	C5- C8 Aliphatics (Unadj.)	ND	5000	ug/kg	
	C9- C12 Aliphatics (Unadj.)	ND	5000	ug/kg	
	C9- C10 Aromatics (Unadj.)	ND	5000	ug/kg	
	C5- C8 Aliphatics	ND	5000	ug/kg	
	C9- C12 Aliphatics	ND	5000	ug/kg	

CAS No.	Surrogate Recoveries	Limits
615-59-8	2,5-Dibromotoluene	72% 70-130%
615-59-8	2,5-Dibromotoluene	70% 70-130%

Blank Spike/Blank Spike Duplicate Summary

Job Number: M96257
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GBH929-BSP1	BH17820.D	1	12/07/10	WS	n/a	n/a	GBH929
GBH929-BSD1	BH17819.D	1	12/07/10	WS	n/a	n/a	GBH929

The QC reported here applies to the following samples: Method: MADEP VPH REV 1.1

M96257-1, M96257-2, M96257-3, M96257-4, M96257-5, M96257-6, M96257-7, M96257-8, M96257-9

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
	C5- C8 Aliphatics (Unadj.)	7500	5540	74	5650	75	2	70-130/25
	C9- C12 Aliphatics (Unadj.)	7500	8160	109	8220	110	1	70-130/25
	C9- C10 Aromatics (Unadj.)	2500	2620	105	2600	104	1	70-130/25

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
615-59-8	2,5-Dibromotoluene	83%	93%	70-130%
615-59-8	2,5-Dibromotoluene	80%	89%	70-130%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M96257
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M96285-3MS	BH17841.D	1	12/08/10	WS	n/a	n/a	GBH929
M96285-3MSD	BH17842.D	1	12/08/10	WS	n/a	n/a	GBH929
M96285-3	BH17840.D	1	12/08/10	WS	n/a	n/a	GBH929

The QC reported here applies to the following samples: Method: MADEP VPH REV 1.1

M96257-1, M96257-2, M96257-3, M96257-4, M96257-5, M96257-6, M96257-7, M96257-8, M96257-9

CAS No.	Compound	M96285-3 ug/kg	Spike Q	ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
---------	----------	-------------------	------------	-------	-------------	---------	--------------	----------	-----	-------------------

CAS No.	Surrogate Recoveries	MS	MSD	M96285-3	Limits
615-59-8	2,5-Dibromotoluene	125%	122%	109%	70-130%
615-59-8	2,5-Dibromotoluene	122%	118%	104%	70-130%

Volatile Surrogate Recovery Summary

Page 1 of 1

Job Number: M96257

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Method: MADEP VPH REV 1.1

Matrix: SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a	S1 ^b
M96257-1	BH17824.D	88.0	83.0
M96257-2	BH17825.D	128.0	119.0
M96257-3	BH17826.D	122.0	117.0
M96257-4	BH17827.D	119.0	114.0
M96257-5	BH17828.D	122.0	116.0
M96257-6	BH17829.D	126.0	119.0
M96257-7	BH17830.D	107.0	100.0
M96257-8	BH17831.D	109.0	96.0
M96257-9	BH17832.D	128.0	124.0
GBH929-BSD1	BH17819.D	93.0	89.0
GBH929-BSP1	BH17820.D	83.0	80.0
GBH929-MB	BH17817.D	72.0	70.0
M96285-3MS	BH17841.D	125.0	122.0
M96285-3MSD	BH17842.D	122.0	118.0

Surrogate Compounds

Recovery Limits

S1 = 2,5-Dibromotoluene

70-130%

(a) Recovery from GC signal #1

(b) Recovery from GC signal #2

7.4.1

7

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Page 1 of 1

Job Number: M96257
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23590-MB	BI2720.D	1	12/13/10	JD	12/10/10	OP23590	GBI102

The QC reported here applies to the following samples:

Method: MADEP EPH REV 1.1

M96257-1, M96257-2, M96257-3, M96257-4, M96257-5, M96257-6, M96257-7, M96257-8, M96257-9

CAS No.	Compound	Result	RL	Units	Q
	C11-C22 Aromatics (Unadj.)	ND	18000	ug/kg	
	C9-C18 Aliphatics	ND	8800	ug/kg	
	C19-C36 Aliphatics	ND	8800	ug/kg	
	C11-C22 Aromatics	ND	18000	ug/kg	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	84% 40-140%
321-60-8	2-Fluorobiphenyl	86% 40-140%
580-13-2	2-Bromonaphthalene	43% 40-140%
3386-33-2	1-Chlorooctadecane	57% 40-140%

8.1.1

8

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 1

Job Number: M96257

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23590-BS	BI2721.D	1	12/13/10	JD	12/10/10	OP23590	GBI102
OP23590-BSD	BI2722.D	1	12/13/10	JD	12/10/10	OP23590	GBI102

The QC reported here applies to the following samples:

Method: MADEP EPH REV 1.1

M96257-1, M96257-2, M96257-3, M96257-4, M96257-5, M96257-6, M96257-7, M96257-8, M96257-9

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
	C11-C22 Aromatics (Unadj.)	69000	75800	110 ^a	74700	104	1	40-140/25
	C9-C18 Aliphatics	25900	16400	63	16800	63	2	40-140/25
	C19-C36 Aliphatics	34500	23800	69	25000	70	5	40-140/25

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
84-15-1	o-Terphenyl	93%	85%	40-140%
321-60-8	2-Fluorobiphenyl	92%	86%	40-140%
580-13-2	2-Bromonaphthalene	46%	56%	40-140%
3386-33-2	1-Chlorooctadecane	52%	48%	40-140%

Sample	Compound	Col #1	Col #2	Breakthrough	Limit
OP23590-BS	2-Methylnaphthalene	3070	467	13.2% *	5.0
OP23590-BS	Naphthalene	2680	681	20.3% *	5.0
OP23590-BSD	2-Methylnaphthalene	3410	42.8	1.2%	5.0
OP23590-BSD	Naphthalene	3160	95.2	2.9%	5.0

(a) Aromatic breakthrough (naphthalene and/or 2-methylnaphthalene) exceeded 5% method limit. Results confirmed by refractionation.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: M96257
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23590-MS	BI2729.D	1	12/13/10	JD	12/10/10	OP23590	GBI102
OP23590-MSD	BI2731.D	1	12/13/10	JD	12/10/10	OP23590	GBI102
M96289-4	BI2740.D	1	12/14/10	JD	12/10/10	OP23590	GBI102

The QC reported here applies to the following samples:

Method: MADEP EPH REV 1.1

M96257-1, M96257-2, M96257-3, M96257-4, M96257-5, M96257-6, M96257-7, M96257-8, M96257-9

CAS No.	Compound	M96289-4 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
	C11-C22 Aromatics (Unadj.)	219000	75400	261000	56	393000	221* a	40* b	40-140/25
	C9-C18 Aliphatics	ND	28300	21800	77	25400	86	15	40-140/25
	C19-C36 Aliphatics	22500	37700	37600	40	43400	53	14	40-140/25

CAS No.	Surrogate Recoveries	MS	MSD	M96289-4	Limits
84-15-1	o-Terphenyl	113%	130%	117%	40-140%
321-60-8	2-Fluorobiphenyl	82%	86%	91%	40-140%
580-13-2	2-Bromonaphthalene	64%	58%	64%	40-140%
3386-33-2	1-Chlorooctadecane	45%	49%	46%	40-140%

(a) Outside control limits due to high level in sample relative to spike amount.

(b) Outside control limits due to possible matrix interference.

Semivolatile Surrogate Recovery Summary

Page 1 of 1

Job Number: M96257

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Method: MADEP EPH REV 1.1

Matrix: SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a	S2 ^a	S3 ^a	S4 ^b
M96257-1	BI2726.D	95.0	84.0	63.0	45.0
M96257-2	BI2753.D	167.0* ^c	89.0	71.0	62.0
M96257-3	BI2735.D	120.0	80.0	74.0	41.0
M96257-4	BI2789.D	62.0	71.0	43.0	57.0
M96257-5	BI2748.D	87.0	95.0	82.0	41.0
M96257-6	BI2791.D	122.0	93.0	67.0	47.0
M96257-7	BI2780.D	101.0	92.0	62.0	29.0* ^d
M96257-8	BI2744.D	107.0	86.0	59.0	37.0* ^e
M96257-9	BI2737.D	122.0	91.0	64.0	41.0
OP23590-BS	BI2721.D	93.0	92.0	46.0	52.0
OP23590-BSD	BI2722.D	85.0	86.0	56.0	48.0
OP23590-MB	BI2720.D	84.0	86.0	43.0	57.0
OP23590-MS	BI2729.D	113.0	82.0	64.0	45.0
OP23590-MSD	BI2731.D	130.0	86.0	58.0	49.0

Surrogate Compounds

Recovery Limits

S1 = o-Terphenyl	40-140%
S2 = 2-Fluorobiphenyl	40-140%
S3 = 2-Bromonaphthalene	40-140%
S4 = 1-Chlorooctadecane	40-140%

(a) Recovery from GC signal #1

(b) Recovery from GC signal #2

(c) Outside control limits due to matrix interference. Confirmed by reanalysis.

(d) Outside control limits due to possible matrix interference. Confirmed by reanalysis.

(e) Outside control limits due to possible matrix interference. Confirmed by refractation.

8.4.1
8

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M96257
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16330
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 12/02/10

Metal	RL	IDL	MDL	MB raw	final
Aluminum	20	1.5	1.5		
Antimony	1.0	.09	.12	0.0	<1.0
Arsenic	1.0	.1	.13	-0.040	<1.0
Barium	5.0	.042	.2	0.20	<5.0
Beryllium	0.40	.014	.015	0.010	<0.40
Boron	10	.033	.12		
Cadmium	0.40	.011	.017	0.010	<0.40
Calcium	500	2.3	2.3		
Chromium	1.0	.047	.047	0.050	<1.0
Cobalt	5.0	.017	.017		
Copper	2.5	.086	.15		
Gold	5.0	.16	.16		
Iron	10	.39	.54		
Lead	1.0	.15	.15	0.050	<1.0
Magnesium	500	3.7	4.2		
Manganese	1.5	.011	.092		
Molybdenum	10	.021	.026		
Nickel	4.0	.021	.028	0.010	<4.0
Palladium	5.0	.24	.24		
Platinum	5.0	.73	.73		
Potassium	500	2.9	3.6		
Selenium	1.0	.11	.19	0.040	<1.0
Silicon	10	.12	.47		
Silver	0.50	.06	.06	0.0	<0.50
Sodium	500	1.5	4.2		
Strontium	1.0	.013	.015		
Thallium	1.0	.07	.12	0.040	<1.0
Tin	10	.036	.036		
Titanium	5.0	.057	.057		
Tungsten	10	.48	.57		
Vanadium	1.0	.073	.073	-0.010	<1.0
Zinc	2.0	.024	.28	0.10	<2.0

Associated samples MP16330: M96257-1, M96257-2, M96257-3, M96257-4, M96257-5, M96257-7, M96257-8, M96257-9

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M96257
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16330
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M96257
 Account: HALEYALD - Haley & Aldrich
 Project: Former Energy International Parcel, MA

QC Batch ID: MP16330
 Matrix Type: SOLID

Methods: SW846 6010C
 Units: mg/kg

Prep Date: 12/02/10 12/02/10

Metal	M96225-8 Original MS		Spikelot MPICP	% Rec	QC Limits	M96225-8 Original DUP		RPD	QC Limits
Aluminum									
Antimony	0.52	20.5	51.2	39.0 (a)	75-125	0.52	0.22	81.1 (b)	0-20
Arsenic	7.8	52.9	51.2	88.1	75-125	7.8	7.9	1.3	0-20
Barium	165	363	205	96.6	75-125	165	169	2.4	0-20
Beryllium	0.50	45.5	51.2	87.9	75-125	0.50	0.53	5.8	0-20
Boron									
Cadmium	0.25	47.1	51.2	91.5	75-125	0.25	0.25	0.0	0-20
Calcium									
Chromium	20.6	64.7	51.2	86.1	75-125	20.6	19.6	5.0	0-20
Cobalt									
Copper									
Gold									
Iron									
Lead	338	374	102	35.1 (a)	75-125	338	302	11.3	0-20
Magnesium									
Manganese									
Molybdenum									
Nickel	15.5	58.5	51.2	84.0	75-125	15.5	14.7	5.3	0-20
Palladium									
Platinum									
Potassium									
Selenium	0.84	42.8	51.2	81.9	75-125	0.84	0.81	3.6	0-20
Silicon									
Silver	0.77	20.2	20.5	94.8	75-125	0.77	0.76	1.3	0-20
Sodium									
Strontium									
Thallium	0.0	43.5	51.2	84.9	75-125	0.0	0.0	NC	0-20
Tin									
Titanium									
Tungsten									
Vanadium	27.0	73.5	51.2	90.8	75-125	27.0	27.1	0.4	0-20
Zinc	198	243	51.2	87.9	75-125	198	200	1.0	0-20

Associated samples MP16330: M96257-1, M96257-2, M96257-3, M96257-4, M96257-5, M96257-7, M96257-8, M96257-9

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M96257
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16330
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity. Post spike within acceptable range.

(b) RPD acceptable due to low duplicate and sample concentrations.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M96257

Account: HALEYALD - Haley & Aldrich

Project: Former Energy International Parcel, MA

QC Batch ID: MP16330

Methods: SW846 6010C

Matrix Type: SOLID

Units: mg/kg

Prep Date:

12/02/10

12/02/10

Metal	BSP Result	Spikelot MPICP	% Rec	QC Limits	BSD Result	Spikelot MPICP	% Rec	BSD RPD	QC Limit
Aluminum									
Antimony	46.8	50	93.6	80-120	47.1	50	94.2	0.6	20
Arsenic	47.8	50	95.6	80-120	47.9	50	95.8	0.2	20
Barium	192	200	96.0	80-120	192	200	96.0	0.0	20
Beryllium	48.2	50	96.4	80-120	47.8	50	95.6	0.8	20
Boron									
Cadmium	49.5	50	99.0	80-120	49.8	50	99.6	0.6	20
Calcium									
Chromium	48.9	50	97.8	80-120	48.6	50	97.2	0.6	20
Cobalt									
Copper									
Gold									
Iron									
Lead	92.9	100	92.9	80-120	93.2	100	93.2	0.3	20
Magnesium									
Manganese									
Molybdenum									
Nickel	48.2	50	96.4	80-120	48.5	50	97.0	0.6	20
Palladium									
Platinum									
Potassium									
Selenium	47.8	50	95.6	80-120	48.0	50	96.0	0.4	20
Silicon									
Silver	20.5	20	102.5	80-120	20.3	20	101.5	1.0	20
Sodium									
Strontium									
Thallium	48.8	50	97.6	80-120	48.8	50	97.6	0.0	20
Tin									
Titanium									
Tungsten									
Vanadium	48.5	50	97.0	80-120	48.3	50	96.6	0.4	20
Zinc	47.9	50	95.8	80-120	48.1	50	96.2	0.4	20

Associated samples MP16330: M96257-1, M96257-2, M96257-3, M96257-4, M96257-5, M96257-7, M96257-8, M96257-9

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M96257
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16330
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M96257

Account: HALEYALD - Haley & Aldrich

Project: Former Energy International Parcel, MA

QC Batch ID: MP16330

Methods: SW846 6010C

Matrix Type: SOLID

Units: mg/kg

Prep Date: 12/02/10

Metal	LCS Result	Spikelot MPLCS70	% Rec	QC Limits
Aluminum				
Antimony	95.4	121	78.8	8-219
Arsenic	103	109	94.5	83-117
Barium	315	325	96.9	83-117
Beryllium	89.1	92.1	96.7	84-116
Boron				
Cadmium	111	110	100.9	81-119
Calcium				
Chromium	88.1	93.4	94.3	81-120
Cobalt				
Copper				
Gold				
Iron				
Lead	137	152	90.1	79-121
Magnesium				
Manganese				
Molybdenum				
Nickel	108	109	99.1	81-118
Palladium				
Platinum				
Potassium				
Selenium	197	207	95.2	79-120
Silicon				
Silver	54.1	51.9	104.2	66-134
Sodium				
Strontium				
Thallium	166	171	97.1	78-122
Tin				
Titanium				
Tungsten				
Vanadium	102	110	92.7	77-124
Zinc	280	299	93.6	82-118

Associated samples MP16330: M96257-1, M96257-2, M96257-3, M96257-4, M96257-5, M96257-7, M96257-8, M96257-9

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M96257
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16330
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: M96257
 Account: HALEYALD - Haley & Aldrich
 Project: Former Energy International Parcel, MA

QC Batch ID: MP16330
 Matrix Type: SOLID

Methods: SW846 6010C
 Units: ug/l

Prep Date: 12/02/10

Metal	M96225-8 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony	5.10	4.50	11.8 (a)	0-10
Arsenic	75.9	80.4	5.9	0-10
Barium	1610	1710	6.1	0-10
Beryllium	4.90	5.30	8.2	0-10
Boron				
Cadmium	2.40	2.30	4.2	0-10
Calcium				
Chromium	201	217	7.8	0-10
Cobalt				
Copper				
Gold				
Iron				
Lead	3300	3600	9.0	0-10
Magnesium				
Manganese				
Molybdenum				
Nickel	151	166	9.6	0-10
Palladium				
Platinum				
Potassium				
Selenium	8.20	8.80	7.3	0-10
Silicon				
Silver	7.50	7.70	2.7	0-10
Sodium				
Strontium				
Thallium	0.00	0.00	NC	0-10
Tin				
Titanium				
Tungsten				
Vanadium	264	283	7.1	0-10
Zinc	1930	2150	11.3 (b)	0-10

Associated samples MP16330: M96257-1, M96257-2, M96257-3, M96257-4, M96257-5, M96257-7, M96257-8, M96257-9

SERIAL DILUTION RESULTS SUMMARY

Login Number: M96257
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16330
Matrix Type: SOLID

Methods: SW846 6010C
Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

(b) Serial dilution indicates possible matrix interference.

9.1.4

9

POST DIGESTATE SPIKE SUMMARY

Login Number: M96257
 Account: HALEYALD - Haley & Aldrich
 Project: Former Energy International Parcel, MA

QC Batch ID: MP16330
 Matrix Type: SOLID

Methods: SW846 6010C
 Units: ug/l

Prep Date:

12/02/10

Metal	Sample ml	Final ml	M96225-8 Raw	PS Corr.** ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum									
Antimony	9.9	10	5.1	5.049	24.1	.1	2	20	95.3 -
Arsenic									
Barium									
Beryllium									
Boron									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Gold									
Iron									
Lead									
Magnesium									
Manganese									
Molybdenum									
Nickel									
Palladium									
Platinum									
Potassium									
Selenium									
Silicon									
Silver									
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Tungsten									
Vanadium									
Zinc									

Associated samples MP16330: M96257-1, M96257-2, M96257-3, M96257-4, M96257-5, M96257-7, M96257-8, M96257-9

POST DIGESTATE SPIKE SUMMARY

Login Number: M96257
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16330
Matrix Type: SOLID

Methods: SW846 6010C
Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(**) Corr. sample result = Raw * (sample volume / final volume)
(anr) Analyte not requested

POST DIGESTATE SPIKE SUMMARY

Login Number: M96257
 Account: HALEYALD - Haley & Aldrich
 Project: Former Energy International Parcel, MA

QC Batch ID: MP16330
 Matrix Type: SOLID

Methods: SW846 6010C
 Units: ug/l

Prep Date:

12/02/10

Metal	Sample ml	Final ml	M96225-8 Raw	PS Corr.** ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Boron									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Gold									
Iron									
Lead	9.9	10	3303	3269.97	8789	.1	660	6600	83.6 -
Magnesium									
Manganese									
Molybdenum									
Nickel									
Palladium									
Platinum									
Potassium									
Selenium									
Silicon									
Silver									
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Tungsten									
Vanadium									
Zinc									

Associated samples MP16330: M96257-1, M96257-2, M96257-3, M96257-4, M96257-5, M96257-7, M96257-8, M96257-9

POST DIGESTATE SPIKE SUMMARY

Login Number: M96257
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16330
Matrix Type: SOLID

Methods: SW846 6010C
Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(**) Corr. sample result = Raw * (sample volume / final volume)
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M96257
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16331
Matrix Type: SOLID

Methods: SW846 7471A
Units: mg/kg

Prep Date: 12/03/10

Metal	RL	IDL	MDL	MB raw	final
-------	----	-----	-----	-----------	-------

Mercury	0.033	.0047	.0055	0.011	<0.033
---------	-------	-------	-------	-------	--------

Associated samples MP16331: M96257-1, M96257-2, M96257-3, M96257-4, M96257-5, M96257-7, M96257-8, M96257-9

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M96257
 Account: HALEYALD - Haley & Aldrich
 Project: Former Energy International Parcel, MA

QC Batch ID: MP16331
 Matrix Type: SOLID

Methods: SW846 7471A
 Units: mg/kg

Prep Date: 12/03/10 12/03/10

Metal	M96199-5		QC	M96199-5		Spikelot	QC	
	Original	DUP	RPD	Limits	Original MS	HGRWS1	% Rec	Limits
Mercury	0.53	0.65	20.3 (a)	0-20	0.53 1.2	0.518	129.3(b)	75-125

Associated samples MP16331: M96257-1, M96257-2, M96257-3, M96257-4, M96257-5, M96257-7, M96257-8, M96257-9

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) High RPD due to possible matrix interference and/or sample non-homogeneity.

(b) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M96257
 Account: HALEYALD - Haley & Aldrich
 Project: Former Energy International Parcel, MA

QC Batch ID: MP16331
 Matrix Type: SOLID

Methods: SW846 7471A
 Units: mg/kg

Prep Date: 12/03/10 12/03/10

Metal	BSP Result	Spikelot HGRWS1	% Rec	QC Limits	BSD Result	Spikelot HGRWS1	% Rec	BSD RPD	QC Limit
Mercury	0.47	0.5	94.0	80-120	0.47	0.5	94.0	0.0	30

Associated samples MP16331: M96257-1, M96257-2, M96257-3, M96257-4, M96257-5, M96257-7, M96257-8, M96257-9

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M96257
 Account: HALEYALD - Haley & Aldrich
 Project: Former Energy International Parcel, MA

QC Batch ID: MP16331
 Matrix Type: SOLID

Methods: SW846 7471A
 Units: mg/kg

Prep Date: 12/03/10

Metal	LCS Result	Spikelot HGLCS69	% Rec	QC Limits
-------	---------------	---------------------	-------	--------------

Mercury 14.9 16.3 91.4 71-129

Associated samples MP16331: M96257-1, M96257-2, M96257-3, M96257-4, M96257-5, M96257-7, M96257-8, M96257-9

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M96257
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16338
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 12/06/10

Metal	RL	IDL	MDL	MB raw	final
Aluminum	20	1.5	1.5		
Antimony	1.0	.09	.12	-0.010	<1.0
Arsenic	1.0	.1	.13	-0.010	<1.0
Barium	5.0	.042	.2	0.18	<5.0
Beryllium	0.40	.014	.015	0.0	<0.40
Boron	10	.033	.12		
Cadmium	0.40	.011	.017	0.0	<0.40
Calcium	500	2.3	2.3		
Chromium	1.0	.047	.047	0.060	<1.0
Cobalt	5.0	.017	.017		
Copper	2.5	.086	.15		
Gold	5.0	.16	.16		
Iron	10	.39	.54		
Lead	1.0	.15	.15	0.030	<1.0
Magnesium	500	3.7	4.2		
Manganese	1.5	.011	.092		
Molybdenum	10	.021	.026		
Nickel	4.0	.021	.028	0.030	<4.0
Palladium	5.0	.24	.24		
Platinum	5.0	.73	.73		
Potassium	500	2.9	3.6		
Selenium	1.0	.11	.19	0.030	<1.0
Silicon	10	.12	.47		
Silver	0.50	.06	.06	0.050	<0.50
Sodium	500	1.5	4.2		
Strontium	1.0	.013	.015		
Thallium	1.0	.07	.12	0.23	<1.0
Tin	10	.036	.036		
Titanium	5.0	.057	.057		
Tungsten	10	.48	.57		
Vanadium	1.0	.073	.073	0.0	<1.0
Zinc	2.0	.024	.28	0.27	<2.0

Associated samples MP16338: M96257-6

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M96257
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16338
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M96257
 Account: HALEYALD - Haley & Aldrich
 Project: Former Energy International Parcel, MA

QC Batch ID: MP16338
 Matrix Type: SOLID

Methods: SW846 6010C
 Units: mg/kg

Prep Date: 12/06/10 12/06/10

Metal	M96289-4 Original MS		Spikelot MPICP	% Rec	QC Limits	M96289-4 Original DUP		RPD	QC Limits
Aluminum									
Antimony	63.6	63.4	42.2	-0.5 (a)	75-125	63.6	36.8	53.4 (d)	0-20
Arsenic	13.1	52.7	42.2	93.9	75-125	13.1	10.9	18.3	0-20
Barium	97.8	207	169	64.7 (a)	75-125	97.8	48.6	67.2 (d)	0-20
Beryllium	0.28	37.0	42.2	87.1	75-125	0.28	0.29	3.5	0-20
Boron									
Cadmium	0.27	43.2	42.2	101.8	75-125	0.27	0.26	3.8	0-20
Calcium									
Chromium	13.1	55.7	42.2	101.0	75-125	13.1	12.4	5.5	0-20
Cobalt									
Copper									
Gold									
Iron									
Lead	1690	1160	84.3	-628.3(b)	75-125	1690	1010	50.4 (d)	0-20
Magnesium									
Manganese									
Molybdenum									
Nickel	14.5	76.0	42.2	145.8(c)	75-125	14.5	17.2	17.0	0-20
Palladium									
Platinum									
Potassium									
Selenium	0.0	40.0	42.2	94.8	75-125	0.0	0.0	NC	0-20
Silicon									
Silver	5.2	17.9	16.9	75.3	75-125	5.2	0.80	146.7(d)	0-20
Sodium									
Strontium									
Thallium	0.0	39.5	42.2	93.7	75-125	0.0	0.0	NC	0-20
Tin									
Titanium									
Tungsten									
Vanadium	21.1	60.6	42.2	93.7	75-125	21.1	22.1	4.6	0-20
Zinc	340	338	42.2	-4.7 (b)	75-125	340	302	11.8	0-20

Associated samples MP16338: M96257-6

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M96257
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16338
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes

- (*) Outside of QC limits
- (N) Matrix Spike Rec. outside of QC limits
- (anr) Analyte not requested
- (a) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity. Post spike within acceptable range.
- (b) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
- (c) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity. Post spike is not within acceptable range.
- (d) High RPD due to possible matrix interference and/or sample non-homogeneity.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M96257
 Account: HALEYALD - Haley & Aldrich
 Project: Former Energy International Parcel, MA

QC Batch ID: MP16338
 Matrix Type: SOLID

Methods: SW846 6010C
 Units: mg/kg

Prep Date: 12/06/10

12/06/10

Metal	BSP Result	Spikelot MPICP	% Rec	QC Limits	BSD Result	Spikelot MPICP	% Rec	BSD RPD	QC Limit
Aluminum									
Antimony	49.3	50	98.6	80-120	48.7	50	97.4	1.2	20
Arsenic	50.1	50	100.2	80-120	49.4	50	98.8	1.4	20
Barium	187	200	93.5	80-120	182	200	91.0	2.7	20
Beryllium	46.7	50	93.4	80-120	45.3	50	90.6	3.0	20
Boron									
Cadmium	51.6	50	103.2	80-120	50.9	50	101.8	1.4	20
Calcium									
Chromium	49.5	50	99.0	80-120	48.8	50	97.6	1.4	20
Cobalt									
Copper									
Gold									
Iron									
Lead	97.5	100	97.5	80-120	96.6	100	96.6	0.9	20
Magnesium									
Manganese									
Molybdenum									
Nickel	50.4	50	100.8	80-120	49.8	50	99.6	1.2	20
Palladium									
Platinum									
Potassium									
Selenium	50.2	50	100.4	80-120	49.3	50	98.6	1.8	20
Silicon									
Silver	21.0	20	105.0	80-120	20.7	20	103.5	1.4	20
Sodium									
Strontium									
Thallium	51.2	50	102.4	80-120	50.4	50	100.8	1.6	20
Tin									
Titanium									
Tungsten									
Vanadium	51.8	50	103.6	80-120	51.2	50	102.4	1.2	20
Zinc	50.2	50	100.4	80-120	49.4	50	98.8	1.6	20

Associated samples MP16338: M96257-6

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M96257

Account: HALEYALD - Haley & Aldrich

Project: Former Energy International Parcel, MA

QC Batch ID: MP16338

Methods: SW846 6010C

Matrix Type: SOLID

Units: mg/kg

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M96257

Account: HALEYALD - Haley & Aldrich

Project: Former Energy International Parcel, MA

QC Batch ID: MP16338

Methods: SW846 6010C

Matrix Type: SOLID

Units: mg/kg

Prep Date: 12/06/10

Metal	LCS Result	Spikelot MPLCS70	% Rec	QC Limits
Aluminum				
Antimony	78.0	121	64.5	8-219
Arsenic	104	109	95.4	83-117
Barium	287	325	88.3	83-117
Beryllium	81.6	92.1	88.6	84-116
Boron				
Cadmium	114	110	103.6	81-119
Calcium				
Chromium	87.0	93.4	93.1	81-120
Cobalt				
Copper				
Gold				
Iron				
Lead	145	152	95.4	79-121
Magnesium				
Manganese				
Molybdenum				
Nickel	110	109	100.9	81-118
Palladium				
Platinum				
Potassium				
Selenium	201	207	97.1	79-120
Silicon				
Silver	51.8	51.9	99.8	66-134
Sodium				
Strontium				
Thallium	167	171	97.7	78-122
Tin				
Titanium				
Tungsten				
Vanadium	104	110	94.5	77-124
Zinc	283	299	94.6	82-118

Associated samples MP16338: M96257-6

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M96257

Account: HALEYALD - Haley & Aldrich

Project: Former Energy International Parcel, MA

QC Batch ID: MP16338

Methods: SW846 6010C

Matrix Type: SOLID

Units: mg/kg

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: M96257
 Account: HALEYALD - Haley & Aldrich
 Project: Former Energy International Parcel, MA

QC Batch ID: MP16338
 Matrix Type: SOLID

Methods: SW846 6010C
 Units: ug/l

Prep Date: 12/06/10

Metal	M96289-4 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony	754	770	2.2	0-10
Arsenic	156	155	0.6	0-10
Barium	1160	1210	4.4	0-10
Beryllium	3.30	3.10	6.1	0-10
Boron				
Cadmium	3.20	2.20	31.3 (a)	0-10
Calcium				
Chromium	156	166	6.4	0-10
Cobalt				
Copper				
Gold				
Iron				
Lead	20000	20200	0.8	0-10
Magnesium				
Manganese				
Molybdenum				
Nickel	171	183	6.8	0-10
Palladium				
Platinum				
Potassium				
Selenium	0.00	0.00	NC	0-10
Silicon				
Silver	61.5	65.7	6.8	0-10
Sodium				
Strontium				
Thallium	0.00	0.00	NC	0-10
Tin				
Titanium				
Tungsten				
Vanadium	250	258	3.3	0-10
Zinc	4030	4450	10.4 (b)	0-10

Associated samples MP16338: M96257-6

9.3.4
9

SERIAL DILUTION RESULTS SUMMARY

Login Number: M96257
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16338
Matrix Type: SOLID

Methods: SW846 6010C
Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

(b) Serial dilution indicates possible matrix interference.

POST DIGESTATE SPIKE SUMMARY

Login Number: M96257
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16338
Matrix Type: SOLID

Methods: SW846 6010C
Units: ug/l

Prep Date:

12/06/10

Metal	Sample ml	Final ml	M96289-4 Raw	PS Corr.** ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum									
Antimony	9.9	10.1	753.7	738.7752	1954	.1	150	1485.149	81.8 -
Arsenic									
Barium	9.9	10.1	1160	1137.03	3253	.1	230	2277.228	92.9 -
Beryllium									
Boron									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Gold									
Iron									
Lead									
Magnesium									
Manganese									
Molybdenum									
Nickel	9.9	10.1	171.4	168.0059	743.5	.1	35	346.5347	166.1 -
Palladium									
Platinum									
Potassium									
Selenium									
Silicon									
Silver									
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Tungsten									
Vanadium									
Zinc									

Associated samples MP16338: M96257-6

POST DIGESTATE SPIKE SUMMARY

Login Number: M96257
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16338
Matrix Type: SOLID

Methods: SW846 6010C
Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(**) Corr. sample result = Raw * (sample volume / final volume)
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M96257
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16339
Matrix Type: LEACHATE

Methods: SW846 6010C
Units: mg/l

Prep Date: 12/07/10

Metal	RL	IDL	MDL	MB raw	final
Aluminum	0.20	.015	.015		
Antimony	0.0060	.0009	.0012		
Arsenic	0.010	.001	.0019		
Barium	0.50	.00042	.0037		
Beryllium	0.0040	.00014	.0002		
Boron	0.10	.00033	.0015		
Cadmium	0.0040	.00011	.00012		
Calcium	5.0	.023	.039		
Chromium	0.010	.00047	.00053		
Cobalt	0.050	.00017	.00028		
Copper	0.025	.00086	.00086		
Gold	0.050	.0016	.0017		
Iron	0.10	.0039	.0041		
Lead	0.010	.0015	.0015	0.00040	<0.010
Magnesium	5.0	.037	.037		
Manganese	0.015	.00011	.0009		
Molybdenum	0.10	.00021	.00064		
Nickel	0.040	.00021	.0003		
Palladium	0.050	.0024	.0025		
Platinum	0.050	.0073	.0073		
Potassium	5.0	.029	.03		
Selenium	0.010	.0011	.0017		
Silicon	0.10	.0012	.0072		
Silver	0.0050	.0006	.0006		
Sodium	5.0	.015	.031		
Strontium	0.010	.00013	.00031		
Thallium	0.0050	.0007	.00074		
Tin	0.10	.00036	.00043		
Titanium	0.050	.00057	.00057		
Tungsten	0.10	.0048	.012		
Vanadium	0.010	.00073	.0011		
Zinc	0.10	.00024	.002		

Associated samples MP16339: M96257-1A, M96257-2A, M96257-3A, M96257-4A, M96257-5A, M96257-6A, M96257-7A, M96257-8A, M96257-9A

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M96257
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16339
Matrix Type: LEACHATE

Methods: SW846 6010C
Units: mg/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M96257
 Account: HALEYALD - Haley & Aldrich
 Project: Former Energy International Parcel, MA

QC Batch ID: MP16339
 Matrix Type: LEACHATE

Methods: SW846 6010C
 Units: mg/l

Prep Date: 12/07/10 12/07/10

Metal	M96225-8A Original MS		Spikelot MPICP	% Rec	QC Limits	M96225-8A Original DUP		RPD	QC Limits
Aluminum									
Antimony									
Arsenic	anr								
Barium	anr								
Beryllium									
Boron									
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper									
Gold									
Iron									
Lead	0.50	1.5	1.0	100.0	75-125	0.50	0.51	2.0	0-20
Magnesium									
Manganese									
Molybdenum									
Nickel	anr								
Palladium									
Platinum									
Potassium									
Selenium	anr								
Silicon									
Silver	anr								
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Tungsten									
Vanadium									
Zinc									

Associated samples MP16339: M96257-1A, M96257-2A, M96257-3A, M96257-4A, M96257-5A, M96257-6A, M96257-7A, M96257-8A, M96257-9A

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M96257
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16339
Matrix Type: LEACHATE

Methods: SW846 6010C
Units: mg/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M96257

Account: HALEYALD - Haley & Aldrich

Project: Former Energy International Parcel, MA

QC Batch ID: MP16339
Matrix Type: LEACHATEMethods: SW846 6010C
Units: mg/l

Prep Date: 12/07/10

12/07/10

Metal	BSP Result	Spikelot MPICP	% Rec	QC Limits	BSD Result	Spikelot MPICP	% Rec	BSD RPD	QC Limit
Aluminum									
Antimony									
Arsenic	anr								
Barium	anr								
Beryllium									
Boron									
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper									
Gold									
Iron									
Lead	0.95	1.0	95.0	80-120	0.94	1.0	94.0	1.1	20
Magnesium									
Manganese									
Molybdenum									
Nickel	anr								
Palladium									
Platinum									
Potassium									
Selenium	anr								
Silicon									
Silver	anr								
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Tungsten									
Vanadium									
Zinc									

Associated samples MP16339: M96257-1A, M96257-2A, M96257-3A, M96257-4A, M96257-5A, M96257-6A, M96257-7A, M96257-8A, M96257-9A

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M96257
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16339
Matrix Type: LEACHATE

Methods: SW846 6010C
Units: mg/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: M96257
 Account: HALEYALD - Haley & Aldrich
 Project: Former Energy International Parcel, MA

QC Batch ID: MP16339
 Matrix Type: LEACHATE

Methods: SW846 6010C
 Units: ug/l

Prep Date: 12/07/10

Metal	M96225-8A Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic	anr			
Barium	anr			
Beryllium				
Boron				
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt				
Copper				
Gold				
Iron				
Lead	503	520	3.4	0-10
Magnesium				
Manganese				
Molybdenum				
Nickel	anr			
Palladium				
Platinum				
Potassium				
Selenium	anr			
Silicon				
Silver	anr			
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Tungsten				
Vanadium				
Zinc				

Associated samples MP16339: M96257-1A, M96257-2A, M96257-3A, M96257-4A, M96257-5A, M96257-6A, M96257-7A, M96257-8A, M96257-9A

SERIAL DILUTION RESULTS SUMMARY

Login Number: M96257
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16339
Matrix Type: LEACHATE

Methods: SW846 6010C
Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

9.4.4

9

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M96257
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16345
Matrix Type: SOLID

Methods: SW846 7471A
Units: mg/kg

Prep Date: 12/07/10

Metal	RL	IDL	MDL	MB	
				raw	final
Mercury	0.033	.0047	.0055	0.0058	<0.033

Associated samples MP16345: M96257-6

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M96257
 Account: HALEYALD - Haley & Aldrich
 Project: Former Energy International Parcel, MA

QC Batch ID: MP16345
 Matrix Type: SOLID

Methods: SW846 7471A
 Units: mg/kg

Prep Date: 12/07/10 12/07/10

Metal	M96289-4 Original MS		Spikelot HGRWS1	% Rec	QC Limits	M96289-4 Original DUP		RPD	QC Limits
Mercury	1.6	2.2	0.518	115.8	75-125	1.6	1.7	6.1	0-20

Associated samples MP16345: M96257-6

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M96257
 Account: HALEYALD - Haley & Aldrich
 Project: Former Energy International Parcel, MA

QC Batch ID: MP16345
 Matrix Type: SOLID

Methods: SW846 7471A
 Units: mg/kg

Prep Date: 12/07/10 12/07/10

Metal	BSP Result	Spikelot HGRWS1	% Rec	QC Limits	BSD Result	Spikelot HGRWS1	% Rec	BSD RPD	QC Limit
Mercury	0.50	0.5	100.0	80-120	0.51	0.5	102.0	2.0	30

Associated samples MP16345: M96257-6

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M96257
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16345
Matrix Type: SOLID

Methods: SW846 7471A
Units: mg/kg

Prep Date: 12/07/10

Metal	LCS Result	Spikelot HGLCS69	% Rec	QC Limits
-------	---------------	---------------------	-------	--------------

Mercury	15.8	16.3	96.9	71-129
---------	------	------	------	--------

Associated samples MP16345: M96257-6

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

9.5.3

9

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: M96257
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Cyanide Reactivity	GP12387/GN33647	1.5	<1.5	mg/kg	250	30.0	12.0	-%
Sulfide Reactivity	GP12388/GN33648	50	<50	mg/kg	400	400	100.0	-%

Associated Samples:

Batch GP12387: M96257-1, M96257-2, M96257-3, M96257-4, M96257-5, M96257-6, M96257-7, M96257-8, M96257-9

Batch GP12388: M96257-1, M96257-2, M96257-3, M96257-4, M96257-5, M96257-6, M96257-7, M96257-8, M96257-9

(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: M96257
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Corrosivity as pH	GN33617	M96225-8		7.7	7.7	0.0	0-%
Cyanide Reactivity	GP12387/GN33647	M96289-4	mg/kg	<1.7	<1.7	0.0	0-20%
Ignitability (Flashpoint)	GN33600	M96199-5	Deg. F	>230	>230	0.0	0-20%
Ignitability (Flashpoint)	GN33658	M96289-4	Deg. F	>230	>230	0.0	0-20%
Redox Potential Vs H2	GN33622	M96225-8	mv	426	423(a)	0.7(a)	0-20%
Solids, Percent	GN33610	M96256-22	%	71.8	74.3	3.4	0-20%
Solids, Percent	GN33620	M96289-4	%	90.5	90.6	0.1	0-20%
Sulfide Reactivity	GP12388/GN33648	M96289-4	mg/kg	<55	<55	0.0	0-20%

Associated Samples:

Batch GN33600: M96257-1, M96257-2, M96257-3, M96257-4, M96257-5
Batch GN33610: M96257-1, M96257-2, M96257-3, M96257-4, M96257-5
Batch GN33617: M96257-1, M96257-2, M96257-3, M96257-4, M96257-5, M96257-6, M96257-7, M96257-8, M96257-9
Batch GN33620: M96257-6, M96257-7, M96257-8, M96257-9
Batch GN33622: M96257-1, M96257-2, M96257-3, M96257-4, M96257-5, M96257-6, M96257-7, M96257-8, M96257-9
Batch GN33658: M96257-6, M96257-7, M96257-8, M96257-9
Batch GP12387: M96257-1, M96257-2, M96257-3, M96257-4, M96257-5, M96257-6, M96257-7, M96257-8, M96257-9
Batch GP12388: M96257-1, M96257-2, M96257-3, M96257-4, M96257-5, M96257-6, M96257-7, M96257-8, M96257-9

(*) Outside of QC limits

(a) Analysis requested after recommended holding time.

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: M96257
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Cyanide Reactivity	GP12387/GN33647	M96289-4	mg/kg	<1.7	276	32.2	11.7	-%
Sulfide Reactivity	GP12388/GN33648	M96289-4	mg/kg	<55	442	387	87.6	-%

Associated Samples:

Batch GP12387: M96257-1, M96257-2, M96257-3, M96257-4, M96257-5, M96257-6, M96257-7, M96257-8, M96257-9

Batch GP12388: M96257-1, M96257-2, M96257-3, M96257-4, M96257-5, M96257-6, M96257-7, M96257-8, M96257-9

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits



12/18/10

Technical Report for

Haley & Aldrich

Former Energy International Parcel, MA

06318-502

Accutest Job Number: M96288

Sampling Date: 12/02/10

Report to:

Haley & Aldrich

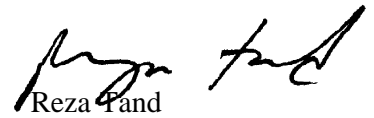
jkullmann@haleyaldrich.com

ATTN: Jane Kullmann

Total number of pages in report: **27**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.


Reza Fand
Lab Director

Client Service contact: Kristen Blanchard 508-481-6200

Certifications: MA (M-MA136, SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) ME (MA00136) FL (E87579) NY (11791) NJ (MA926) PA (6801121) ND (R-188) CO MN (11546AA) NC (653) IL (002337) ISO 17025:2005 (L2235)

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Table of Contents

-1-

Section 1: Sample Summary	3
Section 2: Case Narrative/Conformance Summary	5
Section 3: Sample Results	6
3.1: M96288-1: HA102_0-2'	7
3.2: M96288-2: HA102_2-4'	8
3.3: M96288-4: HA102_6-8'	9
3.4: M96288-8: HA101_0-2'	10
3.5: M96288-9: HA101_2-4'	11
3.6: M96288-11: HA101_6-8'	12
Section 4: Misc. Forms	13
4.1: Certification Exceptions	14
4.2: Chain of Custody	15
4.3: MCP Form	18
4.4: Sample Tracking Chronicle	19
Section 5: GC Semi-volatiles - QC Data Summaries	20
5.1: Method Blank Summary	21
5.2: Blank Spike Summary	23
5.3: Matrix Spike/Matrix Spike Duplicate Summary	25
5.4: Surrogate Recovery Summaries	27

Sample Summary

Haley & Aldrich

Job No: M96288

Former Energy International Parcel, MA
Project No: 06318-502

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
M96288-1	12/02/10	08:15 MD	12/02/10	SO	Soil	HA102_0-2'
M96288-2	12/02/10	08:30 MD	12/02/10	SO	Soil	HA102_2-4'
M96288-4	12/02/10	09:15 MD	12/02/10	SO	Soil	HA102_6-8'
M96288-5	12/02/10	09:50 MD	12/02/10	SO	Soil	HA102_8-10'
M96288-6	12/02/10	10:05 MD	12/02/10	SO	Soil	HA102_10-12'
M96288-7	12/02/10	10:30 MD	12/02/10	SO	Soil	HA102_12-14'
M96288-8	12/02/10	11:15 MD	12/02/10	SO	Soil	HA101_0-2'
M96288-9	12/02/10	11:30 MD	12/02/10	SO	Soil	HA101_2-4'
M96288-11	12/02/10	12:30 MD	12/02/10	SO	Soil	HA101_6-8'
M96288-12	12/02/10	12:30 MD	12/02/10	SO	Soil	HA101_8-10'
M96288-13	12/02/10	13:00 MD	12/02/10	SO	Soil	HA101_10-12'
M96288-14	12/02/10	13:15 MD	12/02/10	SO	Soil	HA101_12-14'
M96288-15	12/02/10	13:30 MD	12/02/10	SO	Soil	HA101_14-16'

Soil samples reported on a dry weight basis unless otherwise indicated on result page.



Sample Summary
(continued)

Haley & Aldrich

Job No: M96288

Former Energy International Parcel, MA
Project No: 06318-502

Sample Number	Collected		Received	Matrix		Client
	Date	Time By		Code	Type	
M96288-16	12/02/10	13:40 MD	12/02/10	SO	Soil	HA101_16-19.5'
M96288-17	12/02/10	13:45 MD	12/02/10	SO	Soil	HA101_19.5-20.0'

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Haley & Aldrich

Job No M96288

Site: Former Energy International Parcel, MA

Report Date 12/18/2010 6:04:34 PM

6 Sample(s) were collected on 12/02/2010 and were received at Accutest on 12/02/2010 properly preserved, at 1.9 Deg. C and intact. These Samples received an Accutest job number of M96288. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Extractables by GC By Method SW846 8082

Matrix SO	Batch ID: OP23548
------------------	--------------------------

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M96256-26MS, M96256-26MSD were used as the QC samples indicated.
- M96288-4 for Decachlorobiphenyl: Outside control limits due to possible matrix interference.

Matrix SO	Batch ID: OP23622
------------------	--------------------------

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M96288-1MS, M96288-1MSD were used as the QC samples indicated.
- M96288-9 for Aroclor 1260: Estimated value due to the presence of other Aroclor pattern.
- M96288-8 for Aroclor 1260: Estimated value due to the presence of other Aroclor pattern.
- RPD of OP23622-MSD for Aroclor 1254: Outside control limits due to possible matrix interference.
- M96288-8 , OP23622-MS/MSD for Tetrachloro-m-xylene: Outside control limits due to possible matrix interference.

Wet Chemistry By Method SM21 2540 B MOD.

Matrix SO	Batch ID: GN33703
------------------	--------------------------

- Sample(s) M96541-5DUP were used as the QC samples for Solids, Percent.

The Accutest Laboratories of New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety. The Accutest Laboratories of NE, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report(M96288).

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	HA102_0-2'	Date Sampled:	12/02/10
Lab Sample ID:	M96288-1	Date Received:	12/02/10
Matrix:	SO - Soil	Percent Solids:	85.3
Method:	SW846 8082 SW846 3540C		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ63048.D	1	12/16/10	CZ	12/13/10	OP23622	GYZ2677
Run #2							

Run #	Initial Weight	Final Volume
Run #1	15.1 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	120	ug/kg	
11104-28-2	Aroclor 1221	ND	120	ug/kg	
11141-16-5	Aroclor 1232	ND	120	ug/kg	
53469-21-9	Aroclor 1242	ND	120	ug/kg	
12672-29-6	Aroclor 1248	ND	120	ug/kg	
11097-69-1	Aroclor 1254	ND	120	ug/kg	
11096-82-5	Aroclor 1260	ND	120	ug/kg	
37324-23-5	Aroclor 1262	ND	120	ug/kg	
11100-14-4	Aroclor 1268	ND	120	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	72%		30-150%
877-09-8	Tetrachloro-m-xylene	41%		30-150%
2051-24-3	Decachlorobiphenyl	129%		30-150%
2051-24-3	Decachlorobiphenyl	123%		30-150%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA102_2-4'	Date Sampled:	12/02/10
Lab Sample ID:	M96288-2	Date Received:	12/02/10
Matrix:	SO - Soil	Percent Solids:	95.4
Method:	SW846 8082 SW846 3540C		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ63128.D	1	12/18/10	CZ	12/13/10	OP23622	GYZ6278
Run #2							

	Initial Weight	Final Volume
Run #1	15.6 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	100	ug/kg	
11104-28-2	Aroclor 1221	ND	100	ug/kg	
11141-16-5	Aroclor 1232	ND	100	ug/kg	
53469-21-9	Aroclor 1242	ND	100	ug/kg	
12672-29-6	Aroclor 1248	ND	100	ug/kg	
11097-69-1	Aroclor 1254	ND	100	ug/kg	
11096-82-5	Aroclor 1260	ND	100	ug/kg	
37324-23-5	Aroclor 1262	ND	100	ug/kg	
11100-14-4	Aroclor 1268	ND	100	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	115%		30-150%
877-09-8	Tetrachloro-m-xylene	139%		30-150%
2051-24-3	Decachlorobiphenyl	138%		30-150%
2051-24-3	Decachlorobiphenyl	97%		30-150%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA102_6-8'	Date Sampled:	12/02/10
Lab Sample ID:	M96288-4	Date Received:	12/02/10
Matrix:	SO - Soil	Percent Solids:	84.3
Method:	SW846 8082 SW846 3540C		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ62726.D	1	12/10/10	CZ	12/07/10	OP23548	GYZ2665
Run #2							

	Initial Weight	Final Volume
Run #1	15.2 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	120	ug/kg	
11104-28-2	Aroclor 1221	ND	120	ug/kg	
11141-16-5	Aroclor 1232	ND	120	ug/kg	
53469-21-9	Aroclor 1242	ND	120	ug/kg	
12672-29-6	Aroclor 1248	ND	120	ug/kg	
11097-69-1	Aroclor 1254	ND	120	ug/kg	
11096-82-5	Aroclor 1260	ND	120	ug/kg	
37324-23-5	Aroclor 1262	ND	120	ug/kg	
11100-14-4	Aroclor 1268	ND	120	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	99%		30-150%
877-09-8	Tetrachloro-m-xylene	101%		30-150%
2051-24-3	Decachlorobiphenyl	156% ^a		30-150%
2051-24-3	Decachlorobiphenyl	105%		30-150%

(a) Outside control limits due to possible matrix interference.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA101_0-2'	Date Sampled:	12/02/10
Lab Sample ID:	M96288-8	Date Received:	12/02/10
Matrix:	SO - Soil	Percent Solids:	88.5
Method:	SW846 8082 SW846 3540C		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ63130.D	1	12/18/10	CZ	12/13/10	OP23622	GYZ6278
Run #2							

Run #	Initial Weight	Final Volume
Run #1	15.2 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	110	ug/kg	
11104-28-2	Aroclor 1221	ND	110	ug/kg	
11141-16-5	Aroclor 1232	ND	110	ug/kg	
53469-21-9	Aroclor 1242	ND	110	ug/kg	
12672-29-6	Aroclor 1248	ND	110	ug/kg	
11097-69-1	Aroclor 1254	299	110	ug/kg	
11096-82-5	Aroclor 1260 ^a	187	110	ug/kg	
37324-23-5	Aroclor 1262	ND	110	ug/kg	
11100-14-4	Aroclor 1268	ND	110	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	114%		30-150%
877-09-8	Tetrachloro-m-xylene	1081% ^b		30-150%
2051-24-3	Decachlorobiphenyl	147%		30-150%
2051-24-3	Decachlorobiphenyl	112%		30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

(b) Outside control limits due to possible matrix interference.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA101_2-4'	Date Sampled:	12/02/10
Lab Sample ID:	M96288-9	Date Received:	12/02/10
Matrix:	SO - Soil	Percent Solids:	85.9
Method:	SW846 8082 SW846 3540C		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ63132.D	1	12/18/10	CZ	12/13/10	OP23622	GYZ6278
Run #2							

Run #	Initial Weight	Final Volume
Run #1	15.2 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	110	ug/kg	
11104-28-2	Aroclor 1221	ND	110	ug/kg	
11141-16-5	Aroclor 1232	ND	110	ug/kg	
53469-21-9	Aroclor 1242	ND	110	ug/kg	
12672-29-6	Aroclor 1248	ND	110	ug/kg	
11097-69-1	Aroclor 1254	232	110	ug/kg	
11096-82-5	Aroclor 1260 ^a	118	110	ug/kg	
37324-23-5	Aroclor 1262	ND	110	ug/kg	
11100-14-4	Aroclor 1268	ND	110	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	112%		30-150%
877-09-8	Tetrachloro-m-xylene	131%		30-150%
2051-24-3	Decachlorobiphenyl	141%		30-150%
2051-24-3	Decachlorobiphenyl	90%		30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA101_6-8'	Date Sampled:	12/02/10
Lab Sample ID:	M96288-11	Date Received:	12/02/10
Matrix:	SO - Soil	Percent Solids:	92.9
Method:	SW846 8082 SW846 3540C		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ62739.D	1	12/10/10	CZ	12/07/10	OP23548	GYZ2666
Run #2							

	Initial Weight	Final Volume
Run #1	15.1 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	110	ug/kg	
11104-28-2	Aroclor 1221	ND	110	ug/kg	
11141-16-5	Aroclor 1232	ND	110	ug/kg	
53469-21-9	Aroclor 1242	ND	110	ug/kg	
12672-29-6	Aroclor 1248	ND	110	ug/kg	
11097-69-1	Aroclor 1254	ND	110	ug/kg	
11096-82-5	Aroclor 1260	ND	110	ug/kg	
37324-23-5	Aroclor 1262	ND	110	ug/kg	
11100-14-4	Aroclor 1268	ND	110	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	92%		30-150%
877-09-8	Tetrachloro-m-xylene	92%		30-150%
2051-24-3	Decachlorobiphenyl	119%		30-150%
2051-24-3	Decachlorobiphenyl	90%		30-150%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Parameter Certifications (MA)
- Chain of Custody
- MCP Form
- Sample Tracking Chronicle

Parameter Certification Exceptions

Job Number: M96288
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

The following parameters included in this report are exceptions to NELAC certification.
The certification status of each is indicated below.

Parameter	CAS#	Method	Mat	Certification Status
Aroclor 1262	37324-23-5	SW846 8082	SO	Certified by SOP MGC204/GC-ECD
Aroclor 1268	11100-14-4	SW846 8082	SO	Certified by SOP MGC204/GC-ECD

4.1
4

**HALEY &
ALDRICH**

Haley & Aldrich, Inc.
465 Medford St.,
Suite 2200,
Boston, MA 02129-1400

CHAIN OF CUSTODY RECORD

Phone	(617) 886-7400
Fax	(617) 886-7600

Page 1 of 2

H&A FILE NO. 06318-502
PROJECT NAME Former Energy International Parcel
H&A CONTACT J. Kullman

LABORATORY Accutest
ADDRESS Maldenborough, MA
CONTACT K. Gibbons

DELIVERY DATE	12/2/10
TURNAROUND TIME	10 Day
PROJECT MANAGER	C. Werthen

Sample No.	Date	Time	Depth	Type	Analysis Requested													Number of Containers	Comments (special instructions, precautions, additional method numbers, etc.)
					VDA	AAS	PAH only	MCP Metals	Pesticides Pests	VPH Metals	Cyanide only	BHR	Fuel Sulfur	Chlorine only	TPH (specify)	TCLP (specify)	Resistivity		
HA102-0-2'	12/10	0815	0-2'	Sed.					X	X							-1	1	Laboratory to use applicable DEP CAM methods, unless otherwise directed. CPLB:
HA102-2-4'		0830	2-4'						X	X							-2	1	
HA102-4-6'		0900	4-6'						X	X							-3	1	
HA102-6-8'		0915	6-8'						X	X							-4	1	
HA102-8-10'		0950	8-10'						X	X							-5	1	
HA102-10-12'		1005	10-12'						X	X							-6	1	
HA102-12-14'		1030	12-14'						X	X							-7	1	
HA101-0-2'		1115	0-2'						X	X							-8	1	
HA101-2-4'		1130	2-4'						X	X							-9	1	
HA101-4-6'		1220	4-6'						X	X							-10	1	

Sampled and Relinquished by		Received by		LIQUID	10 TOTAL	Sampling Comments
Sign <i>[Signature]</i>	Sign <i>willard</i>				VOA Vial	<i>Hold all samples below 8ft</i>
Print <i>No. Thoms Dotsen</i>	Print				Amber Glass	
Firm <i>HTG</i>	Firm <i>ALWE</i>				Plastic Bottle	
Date <i>12/27/10</i> Time	Date <i>12/21/10</i> Time <i>1400</i>				Preservative	
Relinquished by		Received by			Volume	
Sign <i>willard</i>	Sign <i>willard</i>			SOLID		
Print	Print				VOA Vial	
Firm	Firm				Amber Glass	
Date <i>12/26/10</i> Time <i>1500</i>	Date <i>12/26/10</i> Time <i>1500</i>				Clear Glass	
Relinquished by		Received by			Preservative	Evidence samples were tampered with? YES NO
Sign	Sign				Volume	If YES, please explain in section below.
Print	Print	PRESERVATION KEY				
Firm	Firm	A Sample chilled	C NaOH	E H ₂ SO ₄	G Methanol	
Date	Date	B Sample filtered	D HNO ₃	F HCL	H Water/NaHSO ₄ (circle)	<i>1B</i>

If Presumptive Certainty Data Package is needed, initial all sections:

The required minimum field QC samples, as designated in BWSC CAM-VII have been or will be collected, as appropriate, to meet the requirements of Presumptive Certainty. Matrix Spike (MS) samples for MCP Metals and/or Cyanide are included and identified herein.

This Chain of Custody Record (specify) _____ includes _____ does not include samples defined as Drinking Water Samples.

If this Chain of Custody Record identifies samples defined as Drinking Water Samples, Trip Blanks and Field Duplicates are included and identified and analysis of TICs are required, as appropriate. Laboratory should (specify if applicable) _____ analyze

Required Reporting Limits and Data Quality Objectives

<input checked="" type="checkbox"/> RC-S1	<input type="checkbox"/> S1	<input type="checkbox"/> GW1
<input type="checkbox"/> RC-S2	<input type="checkbox"/> S2	<input type="checkbox"/> GW2
<input type="checkbox"/> RC-GW1	<input type="checkbox"/> S3	<input type="checkbox"/> GW3
<input type="checkbox"/> RC-GW2		

Form 3003

WHITE - Laboratory

CANARY - Project Manager

PINK - Haley & Aldrich Laboratory

1:90L

AUGUST 2008

Frank D'Agostino

From: Parkin Kullmann, Jane [jkullmann@haleyaldrich.com]
Sent: Monday, December 13, 2010 2:14 PM
To: Frank D'Agostino
Subject: Energy International PCB soil analyses follow-up

Hi Frank,

I talked with my Project Manager for the Energy International project again, and he thought since the analyses were already conducted, that we should include in the report the results for the samples 8 feet and below for those sample locations specifically (i.e., HA-111, HA-112, and HA-113), as well as the additional samples that we are analyzing for PCBs from 0-2 and 2-4 ft bgs from those same boring locations. For any other boring locations where the results were not yet reported, we would just like to report the results for PCB analyses of soil from 0-2 and 2-4 ft bgs.

Let me know if you have any further questions or need any clarification about the analyses.

Thanks,
 Jane

Jane A. Parkin Kullmann
 Staff Engineer
HALEY & ALDRICH
 465 Medford Street, Suite 2200
 Boston, MA 02129-1400
 Tel: 617.886.7354
 Fax: 617.886.7654
 Cell: 847.370.3018
 Email: jkullmann@HaleyAldrich.com
www.HaleyAldrich.com

12/13/2010

M96288: Chain of Custody
Page 3 of 3



Massachusetts Department
of Environmental Protection
Bureau of Waste Site Cleanup

WSC-CAM	Exhibit VII A
July 1, 2010	Revision No. 1
Final	Page 13 of 38

Exhibit VII A-2: MassDEP Analytical Protocol Certification Form

MassDEP Analytical Protocol Certification Form

Laboratory Name:	Accutest Laboratories of New England	Project #:	M96288		
Project Location:	Former Energy International Parcel, MA	MADEP RTN	None		
This form provides certifications for the following data set: list Laboratory Sample ID Numbers(s) M96288-1, M96288-2, M96288-8, M96288-9 M96288-4, M96288-11					
Matrices: Groundwater/Surface Water () Soil/Sediment (X) Drinking Water () Air () Other ()					
CAM Protocol (check all that apply below):					
8260 VOC () CAM IIA	7470/7471 Hg () CAM III B	MassDEP VPH () CAM IV A	8081 Pesticides () CAM V B	7196 Hex Cr () CAM VI B	Mass DEP APH () CAM IX A
8270 SVOC () CAM II B	7010 Metals () CAM III C	MassDEP EPH () CAM IV B	8151 Herbicides () CAM V C	8330 Explosives () CAM VIII A	TO-15 VOC () CAM IX B
6010 Metals () CAM III A	6020 Metals () CAM III D	8082 PCB (X) CAM V A	9014 Total () Cyanide/PAC CAM VI A	6860 Perchlorate () CAM VIII B	
Affirmative Responses to Questions A Through F are required for "Presumptive Certainty status					
A	Were all samples received in a condition consistent with those described on the Chain-of Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?			<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?			<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?			<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?			<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
E	VPH, EPH, APH, and TO-15 only: a. VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?			<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?			<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Responses to questions G, H, and I below is required for "Presumptive Certainty" status					
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols			<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No ¹
Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data useability and representativeness requirements described in 310 CMR 40.1056(2)(k) and WSC-07-350.					
H	Were all QC performance standards specified in the CAM protocol(s) achieved?			<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No ¹
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?			<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No ¹
¹ All Negative responses must be addressed in an attached Environmental Laboratory case narrative.					
I the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.					
Signature:			Position:	Laboratory Director	
Printed Name:	Reza Tand		Date:	12/18/2010	

Internal Sample Tracking Chronicle

Haley & Aldrich

Job No: M96288

Former Energy International Parcel, MA
Project No: 06318-502

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M96288-1 Collected: 02-DEC-10 08:15 By: MD Received: 02-DEC-10 By: JB HA102_0-2'						
M96288-1	SM21 2540 B MOD.	13-DEC-10	HS			%SOL
M96288-1	SW846 8082	16-DEC-10 09:06	CZ	13-DEC-10	AJ	P8082SOXHLET
M96288-2 Collected: 02-DEC-10 08:30 By: MD Received: 02-DEC-10 By: JB HA102_2-4'						
M96288-2	SM21 2540 B MOD.	13-DEC-10	HS			%SOL
M96288-2	SW846 8082	18-DEC-10 04:12	CZ	13-DEC-10	AJ	P8082SOXHLET
M96288-4 Collected: 02-DEC-10 09:15 By: MD Received: 02-DEC-10 By: JB HA102_6-8'						
M96288-4	SM21 2540 B MOD.	06-DEC-10	HS			%SOL
M96288-4	SW846 8082	10-DEC-10 10:10	CZ	07-DEC-10	FC	P8082SOXHLET
M96288-8 Collected: 02-DEC-10 11:15 By: MD Received: 02-DEC-10 By: JB HA101_0-2'						
M96288-8	SM21 2540 B MOD.	13-DEC-10	HS			%SOL
M96288-8	SW846 8082	18-DEC-10 04:55	CZ	13-DEC-10	AJ	P8082SOXHLET
M96288-9 Collected: 02-DEC-10 11:30 By: MD Received: 02-DEC-10 By: JB HA101_2-4'						
M96288-9	SM21 2540 B MOD.	13-DEC-10	HS			%SOL
M96288-9	SW846 8082	18-DEC-10 05:32	CZ	13-DEC-10	AJ	P8082SOXHLET
M96288-11 Collected: 02-DEC-10 12:30 By: MD Received: 02-DEC-10 By: JB HA101_6-8'						
M96288-11	SM21 2540 B MOD.	06-DEC-10	HS			%SOL
M96288-11	SW846 8082	10-DEC-10 14:38	CZ	07-DEC-10	FC	P8082SOXHLET

GC Semi-volatiles

5

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Page 1 of 1

Job Number: M96288

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23548-MB	YZ62718.D	1	12/09/10	CZ	12/07/10	OP23548	GYZ2665

The QC reported here applies to the following samples:

Method: SW846 8082

M96288-4, M96288-11

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	98	ug/kg	
11104-28-2	Aroclor 1221	ND	98	ug/kg	
11141-16-5	Aroclor 1232	ND	98	ug/kg	
53469-21-9	Aroclor 1242	ND	98	ug/kg	
12672-29-6	Aroclor 1248	ND	98	ug/kg	
11097-69-1	Aroclor 1254	ND	98	ug/kg	
11096-82-5	Aroclor 1260	ND	98	ug/kg	
37324-23-5	Aroclor 1262	ND	98	ug/kg	
11100-14-4	Aroclor 1268	ND	98	ug/kg	

CAS No.	Surrogate Recoveries	Limits	
877-09-8	Tetrachloro-m-xylene	90%	30-150%
877-09-8	Tetrachloro-m-xylene	91%	30-150%
2051-24-3	Decachlorobiphenyl	87%	30-150%
2051-24-3	Decachlorobiphenyl	97%	30-150%

Method Blank Summary

Page 1 of 1

Job Number: M96288

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23622-MB	YZ63039.D	1	12/16/10	CZ	12/13/10	OP23622	GYZ2676

The QC reported here applies to the following samples:

Method: SW846 8082

M96288-1, M96288-2, M96288-8, M96288-9

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	97	ug/kg	
11104-28-2	Aroclor 1221	ND	97	ug/kg	
11141-16-5	Aroclor 1232	ND	97	ug/kg	
53469-21-9	Aroclor 1242	ND	97	ug/kg	
12672-29-6	Aroclor 1248	ND	97	ug/kg	
11097-69-1	Aroclor 1254	ND	97	ug/kg	
11096-82-5	Aroclor 1260	ND	97	ug/kg	
37324-23-5	Aroclor 1262	ND	97	ug/kg	
11100-14-4	Aroclor 1268	ND	97	ug/kg	

CAS No.	Surrogate Recoveries	Limits
877-09-8	Tetrachloro-m-xylene	93% 30-150%
877-09-8	Tetrachloro-m-xylene	101% 30-150%
2051-24-3	Decachlorobiphenyl	108% 30-150%
2051-24-3	Decachlorobiphenyl	116% 30-150%

Blank Spike Summary

Page 1 of 1

Job Number: M96288

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23548-BS	YZ62719.D	1	12/09/10	CZ	12/07/10	OP23548	GYZ2665

The QC reported here applies to the following samples:

Method: SW846 8082

M96288-4, M96288-11

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
12674-11-2	Aroclor 1016	263	324	123	40-140
11104-28-2	Aroclor 1221		ND		40-140
11141-16-5	Aroclor 1232		ND		40-140
53469-21-9	Aroclor 1242		ND		40-140
12672-29-6	Aroclor 1248		ND		40-140
11097-69-1	Aroclor 1254		ND		40-140
11096-82-5	Aroclor 1260	263	277	105	40-140
37324-23-5	Aroclor 1262		ND		40-140
11100-14-4	Aroclor 1268		ND		40-140

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	90%	30-150%
877-09-8	Tetrachloro-m-xylene	91%	30-150%
2051-24-3	Decachlorobiphenyl	97%	30-150%
2051-24-3	Decachlorobiphenyl	108%	30-150%

Blank Spike Summary

Page 1 of 1

Job Number: M96288

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23622-BS	YZ63040.D	1	12/16/10	CZ	12/13/10	OP23622	GYZ2676

The QC reported here applies to the following samples:

Method: SW846 8082

M96288-1, M96288-2, M96288-8, M96288-9

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
12674-11-2	Aroclor 1016	261	253	97	40-140
11104-28-2	Aroclor 1221		ND		40-140
11141-16-5	Aroclor 1232		ND		40-140
53469-21-9	Aroclor 1242		ND		40-140
12672-29-6	Aroclor 1248		ND		40-140
11097-69-1	Aroclor 1254		ND		40-140
11096-82-5	Aroclor 1260	261	281	108	40-140
37324-23-5	Aroclor 1262		ND		40-140
11100-14-4	Aroclor 1268		ND		40-140

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	89%	30-150%
877-09-8	Tetrachloro-m-xylene	89%	30-150%
2051-24-3	Decachlorobiphenyl	101%	30-150%
2051-24-3	Decachlorobiphenyl	110%	30-150%

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: M96288

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23548-MS	YZ62720.D	1	12/09/10	CZ	12/07/10	OP23548	GYZ2665
OP23548-MSD	YZ62721.D	1	12/10/10	CZ	12/07/10	OP23548	GYZ2665
M96256-26	YZ62722.D	1	12/10/10	CZ	12/07/10	OP23548	GYZ2665

The QC reported here applies to the following samples:

Method: SW846 8082

M96288-4, M96288-11

CAS No.	Compound	M96256-26 ug/kg	Spike Q	ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND	346		430	124	359	108	18	40-140/50
11104-28-2	Aroclor 1221	ND			ND		ND		nc	40-140/50
11141-16-5	Aroclor 1232	ND			ND		ND		nc	40-140/50
53469-21-9	Aroclor 1242	ND			ND		ND		nc	40-140/50
12672-29-6	Aroclor 1248	ND			ND		ND		nc	40-140/50
11097-69-1	Aroclor 1254	20.5			143		110		26	40-140/50
11096-82-5	Aroclor 1260	ND	346		463	134	382	114	19	40-140/50
37324-23-5	Aroclor 1262	ND			ND		ND		nc	40-140/50
11100-14-4	Aroclor 1268	ND			ND		ND		nc	40-140/50

CAS No.	Surrogate Recoveries	MS	MSD	M96256-26	Limits
877-09-8	Tetrachloro-m-xylene	119%	101%	91%	30-150%
877-09-8	Tetrachloro-m-xylene	123%	102%	96%	30-150%
2051-24-3	Decachlorobiphenyl	122%	105%	94%	30-150%
2051-24-3	Decachlorobiphenyl	122%	107%	97%	30-150%

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: M96288
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23622-MS	YZ63044.D	1	12/16/10	CZ	12/13/10	OP23622	GYZ2677
OP23622-MSD	YZ63046.D	1	12/16/10	CZ	12/13/10	OP23622	GYZ2677
M96288-1	YZ63048.D	1	12/16/10	CZ	12/13/10	OP23622	GYZ2677

The QC reported here applies to the following samples:

Method: SW846 8082

M96288-1, M96288-2, M96288-8, M96288-9

CAS No.	Compound	M96288-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND		299	292	98	366	123	22	40-140/50
11104-28-2	Aroclor 1221	ND			ND		ND		nc	40-140/50
11141-16-5	Aroclor 1232	ND			ND		ND		nc	40-140/50
53469-21-9	Aroclor 1242	ND			ND		ND		nc	40-140/50
12672-29-6	Aroclor 1248	ND			ND		ND		nc	40-140/50
11097-69-1	Aroclor 1254	81.1			820		167		132* a	40-140/50
11096-82-5	Aroclor 1260	34.0		299	288	85	380	116	28	40-140/50
37324-23-5	Aroclor 1262	ND			ND		ND		nc	40-140/50
11100-14-4	Aroclor 1268	ND			ND		ND		nc	40-140/50

CAS No.	Surrogate Recoveries	MS	MSD	M96288-1	Limits
877-09-8	Tetrachloro-m-xylene	62%	48%	72%	30-150%
877-09-8	Tetrachloro-m-xylene	1405% * a	13% * a	41%	30-150%
2051-24-3	Decachlorobiphenyl	35%	122%	129%	30-150%
2051-24-3	Decachlorobiphenyl	93%	107%	123%	30-150%

(a) Outside control limits due to possible matrix interference.

Semivolatile Surrogate Recovery Summary

Page 1 of 1

Job Number: M96288

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Method: SW846 8082

Matrix: SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a	S1 ^b	S2 ^a	S2 ^b
M96288-1	YZ63048.D	72.0	41.0	129.0	123.0
M96288-2	YZ63128.D	115.0	139.0	138.0	97.0
M96288-4	YZ62726.D	99.0	101.0	156.0* ^c	105.0
M96288-8	YZ63130.D	114.0	1081.0* ^c	147.0	112.0
M96288-9	YZ63132.D	112.0	131.0	141.0	90.0
M96288-11	YZ62739.D	92.0	92.0	119.0	90.0
OP23548-BS	YZ62719.D	90.0	91.0	97.0	108.0
OP23548-MB	YZ62718.D	90.0	91.0	87.0	97.0
OP23548-MS	YZ62720.D	119.0	123.0	122.0	122.0
OP23548-MSD	YZ62721.D	101.0	102.0	105.0	107.0
OP23622-BS	YZ63040.D	89.0	89.0	101.0	110.0
OP23622-MB	YZ63039.D	93.0	101.0	108.0	116.0
OP23622-MS	YZ63044.D	62.0	1405.0* ^c	35.0	93.0
OP23622-MSD	YZ63046.D	48.0	13.0* ^c	122.0	107.0

Surrogate Compounds

Recovery Limits

S1 = Tetrachloro-m-xylene

30-150%

S2 = Decachlorobiphenyl

30-150%

(a) Recovery from GC signal #1

(b) Recovery from GC signal #2

(c) Outside control limits due to possible matrix interference.



12/22/10

Technical Report for

Haley & Aldrich

Former Energy International Parcel, MA

06318-502

Accutest Job Number: M96289

Sampling Date: 12/02/10

Report to:

Haley & Aldrich

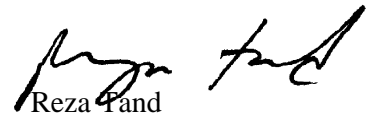
jkullmann@haleyaldrich.com

ATTN: Jane Kullmann

Total number of pages in report: **130**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.


Reza Fand
Lab Director

Client Service contact: Kristen Blanchard 508-481-6200

Certifications: MA (M-MA136, SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) ME (MA00136) FL (E87579) NY (11791) NJ (MA926) PA (6801121) ND (R-188) CO MN (11546AA) NC (653) IL (002337) ISO 17025:2005 (L2235)

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Table of Contents

-1-

Section 1: Sample Summary	4
Section 2: Case Narrative/Conformance Summary	5
Section 3: Sample Results	9
3.1: M96289-1: HA102_0-4'	10
3.2: M96289-2: HA102_4-8'	19
3.3: M96289-2A: HA102_4-8'	29
3.4: M96289-3: HA101_0-4'	30
3.5: M96289-3A: HA101_0-4'	39
3.6: M96289-4: HA101_4-8'	40
3.7: M96289-4A: HA101_4-8'	49
Section 4: Misc. Forms	50
4.1: Certification Exceptions	51
4.2: Chain of Custody	52
4.3: MCP Form	53
4.4: EPH Form	54
4.5: VPH Form	58
4.6: Sample Tracking Chronicle	62
Section 5: GC/MS Volatiles - QC Data Summaries	65
5.1: Method Blank Summary	66
5.2: Blank Spike/Blank Spike Duplicate Summary	69
5.3: Matrix Spike/Matrix Spike Duplicate Summary	72
5.4: Internal Standard Area Summaries	75
5.5: Surrogate Recovery Summaries	77
Section 6: GC/MS Semi-volatiles - QC Data Summaries	78
6.1: Method Blank Summary	79
6.2: Blank Spike/Blank Spike Duplicate Summary	81
6.3: Matrix Spike Summary	84
6.4: Internal Standard Area Summaries	87
6.5: Surrogate Recovery Summaries	89
Section 7: GC Volatiles - QC Data Summaries	90
7.1: Method Blank Summary	91
7.2: Blank Spike/Blank Spike Duplicate Summary	92
7.3: Matrix Spike/Matrix Spike Duplicate Summary	93
7.4: Surrogate Recovery Summaries	94
Section 8: GC Semi-volatiles - QC Data Summaries	95
8.1: Method Blank Summary	96
8.2: Blank Spike/Blank Spike Duplicate Summary	97
8.3: Matrix Spike/Matrix Spike Duplicate Summary	98
8.4: Surrogate Recovery Summaries	99
Section 9: Metals Analysis - QC Data Summaries	100
9.1: Prep QC MP16338: Sb,As,Ba,Be,Cd,Cr,Pb,Ni,Se,Ag,Tl,V,Zn	101
9.2: Prep QC MP16345: Hg	113

Table of Contents

-2-

9.3: Prep QC MP16354: Pb 117

Section 10: General Chemistry - QC Data Summaries 127

10.1: Method Blank and Spike Results Summary 128

10.2: Duplicate Results Summary 129

10.3: Matrix Spike Results Summary 130

Sample Summary

Haley & Aldrich

Job No: M96289

Former Energy International Parcel, MA
Project No: 06318-502

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
M96289-1	12/02/10	08:50 MD	12/02/10	SO	Soil	HA102_0-4'
M96289-2	12/02/10	09:30 MD	12/02/10	SO	Soil	HA102_4-8'
M96289-2A	12/02/10	09:30 MD	12/02/10	SO	Soil	HA102_4-8'
M96289-3	12/02/10	12:00 MD	12/02/10	SO	Soil	HA101_0-4'
M96289-3A	12/02/10	12:00 MD	12/02/10	SO	Soil	HA101_0-4'
M96289-4	12/02/10	12:50 MD	12/02/10	SO	Soil	HA101_4-8'
M96289-4A	12/02/10	12:50 MD	12/02/10	SO	Soil	HA101_4-8'
M96289-4AD	12/02/10	12:50 MD	12/02/10	SO	Soil Dup/MSD	HA101_4-8'
M96289-4AS	12/02/10	12:50 MD	12/02/10	SO	Soil Matrix Spike	HA101_4-8'
M96289-4D	12/02/10	12:50 MD	12/02/10	SO	Soil Dup/MSD	HA101_4-8'
M96289-4S	12/02/10	12:50 MD	12/02/10	SO	Soil Matrix Spike	HA101_4-8'

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Haley & Aldrich

Job No M96289

Site: Former Energy International Parcel, MA

Report Date 12/22/2010 4:40:38 PM

4 Sample(s) were collected on 12/02/2010 and were received at Accutest on 12/02/2010 properly preserved, at 1.9 Deg. C and intact. These Samples received an Accutest job number of M96289. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix SO	Batch ID: MSR666
------------------	-------------------------

- All samples were analyzed within the recommended method holding time.
- Sample(s) M96257-6MS, M96257-6MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Blank Spike Recovery(s) for Isopropylbenzene, Tetrachloroethene are outside control limits. Blank Spike meets program technical requirements.
- Matrix Spike Recovery(s) for 2-Hexanone, Dibromochloromethane, Hexachlorobutadiene, Isopropylbenzene, Naphthalene, Styrene, Tetrachloroethene are outside control limits. Outside control limits due to possible matrix interference. Refer to Blank Spike.
- Matrix Spike Duplicate Recovery(s) for 2-Hexanone, Dibromochloromethane, Hexachlorobutadiene, Isopropylbenzene are outside control limits. Outside control limits due to possible matrix interference. Refer to Blank Spike.
- The response factor (RF) for the 2-Butanone low point in the initial calibration MSR638-ICC638 is 0.028, less than the required RF of 0.1 as noted in Table 4 of SW846 8260C. 2-Butanone is a potential difficult compound.
- Initial calibration verification MSR638-ICV638 for acetone, isopropylbenzene exceed 30% Difference.

Extractables by GCMS By Method SW846 8270C

Matrix SO	Batch ID: OP23538
------------------	--------------------------

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) M96289-4MS were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for Phenanthrene, Pyrene are outside control limits. Outside control limits due to high level in sample relative to spike amount.
- OP23538-MS for , 2,4-Dinitrophenol, Benzoic acid, Hexachlorocyclopentadiene, Pentachlorophenol : Outside control limits due to possible matrix interference. Refer to Blank Spike.
- OP23538-BS for Acetophenone: Outside control limits. Associated samples are non-detect for this compound.
- Initial calibration verification standard MSS822-ICV822, file S19885 for Aniline, Nitrobenzene-d5, 4-Chloroaniline, 2-Fluorobiphenyl, Terphenyl-d14, 3,3'-Dichlorobenzidine exceeds 30% Difference Initial calibration verification standard MSS822-ICV822, file S19884 for 2-Fluorophenol, Phenol-d5, 2,4,6-Tribromophenol exceeds 30% Difference
-

Volatiles by GC By Method MADEP VPH REV 1.1

Matrix SO

Batch ID: GBH929

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Only range requested.
- M96289-1 for 2,5-Dibromotoluene: Outside control limits due to matrix interference. Confirmed by reanalysis.

Matrix SO

Batch ID: GBH930

- M96289-1: Confirmation run.
- M96289-1 for 2,5-Dibromotoluene: Outside control limits due to matrix interference. Confirmed by reanalysis.

Extractables by GC By Method MADEP EPH REV 1.1

Matrix SO

Batch ID: OP23590

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M96289-4MS, M96289-4MSD were used as the QC samples indicated.
- RPD of Matrix Spike Duplicate Recovery(s) for C11-C22 Aromatics (Unadj.) are outside control limits. Outside control limits due to possible matrix interference.
- Only range requested.
- OP23590-BS for C11-C22 Aromatics (Unadj.): Aromatic breakthrough (naphthalene and/or 2-methylnaphthalene) exceeded 5% method limit. Results confirmed by refractionation.
- M96289-1 for 2-Bromonaphthalene: Outside control limits due to possible matrix interference. Confirmed by refractionation.
- M96289-2 for 1-Chlorooctadecane: Outside control limits due to possible matrix interference. Confirmed by refractionation.
- Matrix Spike Duplicate Recovery(s) for C11-C22 Aromatics (Unadj.) are outside control limits. Outside control limits due to high level in sample relative to spike amount.

Metals By Method SW846 6010C

Matrix LEACHATE

Batch ID: MP16354

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M96199-5AMS, M96199-5ASDL, M96289-4ADUP, M96289-4ALS were used as the QC samples for metals.

Matrix SO

Batch ID: MP16338

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M96289-4DUP, M96289-4MS, M96289-4PS, M96289-4SDL, M96289-4DUP were used as the QC samples for metals.
- Matrix Spike Recovery(s) for Nickel, Antimony, Barium are outside control limits. Spike recovery indicates possible matrix interference and/or sample nonhomogeneity. Post spike is not within acceptable range.
- Matrix Spike Recovery(s) for Lead, Zinc are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
- RPD(s) for Duplicate for Antimony, Barium, Lead, Silver are outside control limits for sample MP16338-D1. High RPD due to possible matrix interference and/or sample non-homogeneity.
- RPD(s) for Serial Dilution for Cadmium are outside control limits for sample MP16338-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- MP16338-S1 for Barium, Antimony: Spike recovery indicates possible matrix interference and/or sample nonhomogeneity. Post spike within acceptable range.
- M96289-2 for Antimony: Elevated RL due to dilution required for matrix interference.
- MP16338-SD1 for Zinc: Serial dilution indicates possible matrix interference.

Metals By Method SW846 7471A

Matrix SO

Batch ID: MP16345

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M96289-4DUP, M96289-4MS were used as the QC samples for metals.

Wet Chemistry By Method ASTM D1498-76M

Matrix SO

Batch ID: GN33622

- Sample(s) M96225-8DUP were used as the QC samples for Redox Potential Vs H2.
- GN33622-D1 for Redox Potential Vs H2: Analysis requested after recommended holding time.

Matrix SO

Batch ID: GN33623

- Sample(s) M96199-6DUP were used as the QC samples for Redox Potential Vs H2.
- GN33623-D1 for Redox Potential Vs H2: Analysis requested after recommended holding time.

Wet Chemistry By Method SM21 2540 B MOD.

Matrix SO

Batch ID: GN33620

- Sample(s) M96289-4DUP were used as the QC samples for Solids, Percent.

Wet Chemistry By Method SW846 1020

Matrix SO

Batch ID: GN33658

- Sample(s) M96289-4DUP were used as the QC samples for Ignitability (Flashpoint).

Wet Chemistry By Method SW846 CHAP7

Matrix SO

Batch ID: GN33617

- Sample(s) M96225-8DUP were used as the QC samples for Corrosivity as pH.

Matrix SO

Batch ID: GN33618

- Sample(s) M96289-3DUP were used as the QC samples for Corrosivity as pH.

Matrix SO

Batch ID: GP12387

- All samples were distilled within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M96289-4DUP, M96289-4MS were used as the QC samples for Cyanide Reactivity.

Matrix SO

Batch ID: GP12388

- All samples were distilled within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M96289-4DUP, M96289-4MS were used as the QC samples for Sulfide Reactivity.

Accutest may not have met all requested limits due to methodology limitations, sample matrix, dilutions, or percents solids.

The Accutest Laboratories of New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety. The Accutest Laboratories of NE, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report(M96289).

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	HA102_0-4'	Date Sampled:	12/02/10
Lab Sample ID:	M96289-1	Date Received:	12/02/10
Matrix:	SO - Soil	Percent Solids:	88.6
Method:	SW846 8260B		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R18692.D	1	12/09/10	GK	n/a	n/a	MSR666
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	12.1 g	10.0 ml	100 ul
Run #2			

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	260	ug/kg	
71-43-2	Benzene	ND	26	ug/kg	
108-86-1	Bromobenzene	ND	260	ug/kg	
74-97-5	Bromochloromethane	ND	260	ug/kg	
75-27-4	Bromodichloromethane	ND	110	ug/kg	
75-25-2	Bromoform	ND	110	ug/kg	
74-83-9	Bromomethane	ND	110	ug/kg	
78-93-3	2-Butanone (MEK)	ND	260	ug/kg	
104-51-8	n-Butylbenzene	ND	260	ug/kg	
135-98-8	sec-Butylbenzene	ND	260	ug/kg	
98-06-6	tert-Butylbenzene	ND	260	ug/kg	
75-15-0	Carbon disulfide	ND	260	ug/kg	
56-23-5	Carbon tetrachloride	ND	110	ug/kg	
108-90-7	Chlorobenzene	ND	110	ug/kg	
75-00-3	Chloroethane	ND	260	ug/kg	
67-66-3	Chloroform	ND	110	ug/kg	
74-87-3	Chloromethane	ND	260	ug/kg	
95-49-8	o-Chlorotoluene	ND	260	ug/kg	
106-43-4	p-Chlorotoluene	ND	260	ug/kg	
108-20-3	Di-Isopropyl ether	ND	110	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	260	ug/kg	
124-48-1	Dibromochloromethane	ND	110	ug/kg	
106-93-4	1,2-Dibromoethane	ND	110	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	110	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	110	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	110	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	110	ug/kg	
75-34-3	1,1-Dichloroethane	ND	110	ug/kg	
107-06-2	1,2-Dichloroethane	ND	110	ug/kg	
75-35-4	1,1-Dichloroethene	ND	110	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	110	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	110	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA102_0-4'	Date Sampled:	12/02/10
Lab Sample ID:	M96289-1	Date Received:	12/02/10
Matrix:	SO - Soil	Percent Solids:	88.6
Method:	SW846 8260B		
Project:	Former Energy International Parcel, MA		

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
78-87-5	1,2-Dichloropropane	ND	110	ug/kg	
142-28-9	1,3-Dichloropropane	ND	260	ug/kg	
594-20-7	2,2-Dichloropropane	ND	260	ug/kg	
563-58-6	1,1-Dichloropropene	ND	260	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	110	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	110	ug/kg	
123-91-1	1,4-Dioxane	ND	1300	ug/kg	
60-29-7	Ethyl Ether	ND	260	ug/kg	
100-41-4	Ethylbenzene	ND	110	ug/kg	
87-68-3	Hexachlorobutadiene	ND	260	ug/kg	
591-78-6	2-Hexanone	ND	260	ug/kg	
98-82-8	Isopropylbenzene	ND	260	ug/kg	
99-87-6	p-Isopropyltoluene	ND	260	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	110	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	260	ug/kg	
74-95-3	Methylene bromide	ND	260	ug/kg	
75-09-2	Methylene chloride	ND	110	ug/kg	
91-20-3	Naphthalene	271	260	ug/kg	
103-65-1	n-Propylbenzene	ND	260	ug/kg	
100-42-5	Styrene	ND	260	ug/kg	
994-05-8	tert-Amyl Methyl Ether	ND	260	ug/kg	
637-92-3	tert-Butyl Ethyl Ether	ND	110	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	260	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	110	ug/kg	
127-18-4	Tetrachloroethene	ND	110	ug/kg	
109-99-9	Tetrahydrofuran	ND	530	ug/kg	
108-88-3	Toluene	ND	260	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	260	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	260	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	110	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	110	ug/kg	
79-01-6	Trichloroethene	ND	110	ug/kg	
75-69-4	Trichlorofluoromethane	ND	110	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	260	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	260	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	260	ug/kg	
75-01-4	Vinyl chloride	ND	110	ug/kg	
	m,p-Xylene	145	110	ug/kg	
95-47-6	o-Xylene	ND	110	ug/kg	
1330-20-7	Xylene (total)	145	110	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA102_0-4'**Lab Sample ID:** M96289-1**Matrix:** SO - Soil**Method:** SW846 8260B**Project:** Former Energy International Parcel, MA**Date Sampled:** 12/02/10**Date Received:** 12/02/10**Percent Solids:** 88.6

VOA MCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		70-130%
2037-26-5	Toluene-D8	114%		70-130%
460-00-4	4-Bromofluorobenzene	115%		70-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA102_0-4'	Date Sampled:	12/02/10
Lab Sample ID:	M96289-1	Date Received:	12/02/10
Matrix:	SO - Soil	Percent Solids:	88.6
Method:	SW846 8270C SW846 3510C		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	S19972.D	1	12/13/10	PR	12/06/10	OP23538	MSS826
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.2 g	1.0 ml
Run #2		

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
65-85-0	Benzoic acid	ND	560	ug/kg	
95-57-8	2-Chlorophenol	ND	280	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	560	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	560	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	560	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1100	ug/kg	
95-48-7	2-Methylphenol	ND	560	ug/kg	
	3&4-Methylphenol	ND	560	ug/kg	
88-75-5	2-Nitrophenol	ND	560	ug/kg	
100-02-7	4-Nitrophenol	ND	1100	ug/kg	
87-86-5	Pentachlorophenol	ND	560	ug/kg	
108-95-2	Phenol	ND	280	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	560	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	560	ug/kg	
83-32-9	Acenaphthene	ND	280	ug/kg	
208-96-8	Acenaphthylene	ND	280	ug/kg	
98-86-2	Acetophenone	ND	560	ug/kg	
62-53-3	Aniline	ND	560	ug/kg	
120-12-7	Anthracene	ND	280	ug/kg	
56-55-3	Benzo(a)anthracene	357	280	ug/kg	
50-32-8	Benzo(a)pyrene	316	280	ug/kg	
205-99-2	Benzo(b)fluoranthene	296	280	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	280	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	280	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	280	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	280	ug/kg	
91-58-7	2-Chloronaphthalene	ND	280	ug/kg	
106-47-8	4-Chloroaniline	ND	560	ug/kg	
218-01-9	Chrysene	436	280	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	280	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	280	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	280	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA102_0-4'	Date Sampled:	12/02/10
Lab Sample ID:	M96289-1	Date Received:	12/02/10
Matrix:	SO - Soil	Percent Solids:	88.6
Method:	SW846 8270C SW846 3510C		
Project:	Former Energy International Parcel, MA		

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	280	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	280	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	280	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	280	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	560	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	560	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	280	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	280	ug/kg	
132-64-9	Dibenzofuran	ND	280	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	280	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	280	ug/kg	
84-66-2	Diethyl phthalate	ND	280	ug/kg	
131-11-3	Dimethyl phthalate	ND	280	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	280	ug/kg	
206-44-0	Fluoranthene	598	280	ug/kg	
86-73-7	Fluorene	ND	280	ug/kg	
118-74-1	Hexachlorobenzene	ND	280	ug/kg	
87-68-3	Hexachlorobutadiene	ND	280	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	560	ug/kg	
67-72-1	Hexachloroethane	ND	280	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	280	ug/kg	
78-59-1	Isophorone	ND	280	ug/kg	
91-57-6	2-Methylnaphthalene	617	280	ug/kg	
91-20-3	Naphthalene	ND	280	ug/kg	
98-95-3	Nitrobenzene	ND	280	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	280	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	280	ug/kg	
85-01-8	Phenanthrene	354	280	ug/kg	
129-00-0	Pyrene	630	280	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	280	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	44%		30-130%
4165-62-2	Phenol-d5	44%		30-130%
118-79-6	2,4,6-Tribromophenol	48%		30-130%
4165-60-0	Nitrobenzene-d5	72%		30-130%
321-60-8	2-Fluorobiphenyl	53%		30-130%
1718-51-0	Terphenyl-d14	46%		30-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA102_0-4'

Lab Sample ID: M96289-1

Date Sampled: 12/02/10

Matrix: SO - Soil

Date Received: 12/02/10

Method: MADEP VPH REV 1.1

Percent Solids: 88.6

Project: Former Energy International Parcel, MA

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	BH17833.D	1	12/08/10	WS	n/a	n/a	GBH929
Run #2 ^b	BH17848.D	1	12/08/10	WS	n/a	n/a	GBH930

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	12.1 g	11.0 ml	10.0 ul
Run #2	12.1 g	11.0 ml	10.0 ul

Volatile TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C5- C8 Aliphatics (Unadj.)	ND	58000	ug/kg	
	C9- C12 Aliphatics (Unadj.)	423000	58000	ug/kg	
	C9- C10 Aromatics (Unadj.)	194000	58000	ug/kg	
	C5- C8 Aliphatics	ND	58000	ug/kg	
	C9- C12 Aliphatics	228000	58000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	248% ^c	223% ^c	70-130%
615-59-8	2,5-Dibromotoluene	176% ^c	134% ^c	70-130%

(a) Outside control limits due to possible matrix interference. Confirmed by re-extraction/reanalysis.

(b) Confirmation run.

(c) Outside control limits due to matrix interference. Confirmed by reanalysis.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA102_0-4'	Date Sampled:	12/02/10
Lab Sample ID:	M96289-1	Date Received:	12/02/10
Matrix:	SO - Soil	Percent Solids:	88.6
Method:	MADEP EPH REV 1.1 SW846 3545		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BI2782.D	1	12/15/10	JD	12/10/10	OP23590	GBI104
Run #2							

	Initial Weight	Final Volume
Run #1	11.2 g	2.0 ml
Run #2		

Extractable TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C11-C22 Aromatics (Unadj.)	747000	20000	ug/kg	
	C9-C18 Aliphatics	1410000	10000	ug/kg	
	C19-C36 Aliphatics	710000	10000	ug/kg	
	C11-C22 Aromatics	739000	20000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	78%		40-140%
321-60-8	2-Fluorobiphenyl	127%		40-140%
580-13-2	2-Bromonaphthalene	231% ^a		40-140%
3386-33-2	1-Chlorooctadecane	49%		40-140%

(a) Outside control limits due to possible matrix interference. Confirmed by refractionation.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA102_0-4'

Lab Sample ID: M96289-1

Matrix: SO - Soil

Date Sampled: 12/02/10

Date Received: 12/02/10

Percent Solids: 88.6

Project: Former Energy International Parcel, MA

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analized By	Method	Prep Method
Antimony	< 0.86	0.86	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Arsenic	7.4	0.86	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Barium	41.2	4.3	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Beryllium	0.35	0.34	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Cadmium	0.40	0.34	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Chromium	13.4	0.86	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Lead	83.6	0.86	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Mercury	0.74	0.034	mg/kg	1	12/07/10	12/08/10 PY	SW846 7471A ²	SW846 7471A ⁴
Nickel	14.4	3.4	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Selenium	< 0.86	0.86	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Silver	< 0.43	0.43	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Thallium	< 0.86	0.86	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Vanadium	26.8	0.86	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Zinc	105	1.7	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³

(1) Instrument QC Batch: MA12497

(2) Instrument QC Batch: MA12500

(3) Prep QC Batch: MP16338

(4) Prep QC Batch: MP16345

RL = Reporting Limit

Report of Analysis

Client Sample ID: HA102_0-4'**Lab Sample ID:** M96289-1**Matrix:** SO - Soil**Date Sampled:** 12/02/10**Date Received:** 12/02/10**Percent Solids:** 88.6**Project:** Former Energy International Parcel, MA

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Corrosivity as pH	7.4			1	12/03/10	MA	SW846 CHAP7
Cyanide Reactivity	< 1.7	1.7	mg/kg	1	12/08/10	BF	SW846 CHAP7
Ignitability (Flashpoint)	> 230		Deg. F	1	12/08/10	BF	SW846 1020
Redox Potential Vs H2	427		mv	1	12/03/10	MC	ASTM D1498-76M
Solids, Percent	88.6		%	1	12/03/10	HS	SM21 2540 B MOD.
Sulfide Reactivity	< 56	56	mg/kg	1	12/08/10	BF	SW846 CHAP7

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HA102_4-8'	Date Sampled:	12/02/10
Lab Sample ID:	M96289-2	Date Received:	12/02/10
Matrix:	SO - Soil	Percent Solids:	81.7
Method:	SW846 8260B		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R18679.D	1	12/09/10	GK	n/a	n/a	MSR666
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	9.90 g	10.0 ml	100 ul
Run #2			

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	370	ug/kg	
71-43-2	Benzene	ND	37	ug/kg	
108-86-1	Bromobenzene	ND	370	ug/kg	
74-97-5	Bromochloromethane	ND	370	ug/kg	
75-27-4	Bromodichloromethane	ND	150	ug/kg	
75-25-2	Bromoform	ND	150	ug/kg	
74-83-9	Bromomethane	ND	150	ug/kg	
78-93-3	2-Butanone (MEK)	ND	370	ug/kg	
104-51-8	n-Butylbenzene	ND	370	ug/kg	
135-98-8	sec-Butylbenzene	ND	370	ug/kg	
98-06-6	tert-Butylbenzene	ND	370	ug/kg	
75-15-0	Carbon disulfide	ND	370	ug/kg	
56-23-5	Carbon tetrachloride	ND	150	ug/kg	
108-90-7	Chlorobenzene	ND	150	ug/kg	
75-00-3	Chloroethane	ND	370	ug/kg	
67-66-3	Chloroform	ND	150	ug/kg	
74-87-3	Chloromethane	ND	370	ug/kg	
95-49-8	o-Chlorotoluene	ND	370	ug/kg	
106-43-4	p-Chlorotoluene	ND	370	ug/kg	
108-20-3	Di-Isopropyl ether	ND	150	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	370	ug/kg	
124-48-1	Dibromochloromethane	ND	150	ug/kg	
106-93-4	1,2-Dibromoethane	ND	150	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	150	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	150	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	150	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	150	ug/kg	
75-34-3	1,1-Dichloroethane	ND	150	ug/kg	
107-06-2	1,2-Dichloroethane	ND	150	ug/kg	
75-35-4	1,1-Dichloroethene	ND	150	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	150	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	150	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA102_4-8'

Lab Sample ID: M96289-2

Date Sampled: 12/02/10

Matrix: SO - Soil

Date Received: 12/02/10

Method: SW846 8260B

Percent Solids: 81.7

Project: Former Energy International Parcel, MA

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
78-87-5	1,2-Dichloropropane	ND	150	ug/kg	
142-28-9	1,3-Dichloropropane	ND	370	ug/kg	
594-20-7	2,2-Dichloropropane	ND	370	ug/kg	
563-58-6	1,1-Dichloropropene	ND	370	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	150	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	150	ug/kg	
123-91-1	1,4-Dioxane	ND	1800	ug/kg	
60-29-7	Ethyl Ether	ND	370	ug/kg	
100-41-4	Ethylbenzene	ND	150	ug/kg	
87-68-3	Hexachlorobutadiene	ND	370	ug/kg	
591-78-6	2-Hexanone	ND	370	ug/kg	
98-82-8	Isopropylbenzene	ND	370	ug/kg	
99-87-6	p-Isopropyltoluene	ND	370	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	150	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	370	ug/kg	
74-95-3	Methylene bromide	ND	370	ug/kg	
75-09-2	Methylene chloride	ND	150	ug/kg	
91-20-3	Naphthalene	ND	370	ug/kg	
103-65-1	n-Propylbenzene	ND	370	ug/kg	
100-42-5	Styrene	ND	370	ug/kg	
994-05-8	tert-Amyl Methyl Ether	ND	370	ug/kg	
637-92-3	tert-Butyl Ethyl Ether	ND	150	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	370	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	150	ug/kg	
127-18-4	Tetrachloroethene	ND	150	ug/kg	
109-99-9	Tetrahydrofuran	ND	730	ug/kg	
108-88-3	Toluene	395	370	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	370	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	370	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	150	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	150	ug/kg	
79-01-6	Trichloroethene	ND	150	ug/kg	
75-69-4	Trichlorofluoromethane	ND	150	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	370	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	370	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	370	ug/kg	
75-01-4	Vinyl chloride	ND	150	ug/kg	
	m,p-Xylene	ND	150	ug/kg	
95-47-6	o-Xylene	ND	150	ug/kg	
1330-20-7	Xylene (total)	ND	150	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA102_4-8'	Date Sampled:	12/02/10
Lab Sample ID:	M96289-2	Date Received:	12/02/10
Matrix:	SO - Soil	Percent Solids:	81.7
Method:	SW846 8260B		
Project:	Former Energy International Parcel, MA		

VOA MCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		70-130%
2037-26-5	Toluene-D8	108%		70-130%
460-00-4	4-Bromofluorobenzene	109%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA102_4-8'	Date Sampled:	12/02/10
Lab Sample ID:	M96289-2	Date Received:	12/02/10
Matrix:	SO - Soil	Percent Solids:	81.7
Method:	SW846 8270C SW846 3510C		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	S19973.D	1	12/13/10	PR	12/06/10	OP23538	MSS826
Run #2	S20058.D	10	12/16/10	PR	12/06/10	OP23538	MSS831

	Initial Weight	Final Volume
Run #1	20.1 g	1.0 ml
Run #2	20.1 g	1.0 ml

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
65-85-0	Benzoic acid	ND	610	ug/kg	
95-57-8	2-Chlorophenol	ND	310	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	610	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	610	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	610	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1200	ug/kg	
95-48-7	2-Methylphenol	ND	610	ug/kg	
	3&4-Methylphenol	ND	610	ug/kg	
88-75-5	2-Nitrophenol	ND	610	ug/kg	
100-02-7	4-Nitrophenol	ND	1200	ug/kg	
87-86-5	Pentachlorophenol	ND	610	ug/kg	
108-95-2	Phenol	ND	310	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	610	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	610	ug/kg	
83-32-9	Acenaphthene	2790	310	ug/kg	
208-96-8	Acenaphthylene	ND	310	ug/kg	
98-86-2	Acetophenone	ND	610	ug/kg	
62-53-3	Aniline	ND	610	ug/kg	
120-12-7	Anthracene	5750	310	ug/kg	
56-55-3	Benzo(a)anthracene	7760	310	ug/kg	
50-32-8	Benzo(a)pyrene	5270	310	ug/kg	
205-99-2	Benzo(b)fluoranthene	3900	310	ug/kg	
191-24-2	Benzo(g,h,i)perylene	2370	310	ug/kg	
207-08-9	Benzo(k)fluoranthene	3870	310	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	310	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	310	ug/kg	
91-58-7	2-Chloronaphthalene	ND	310	ug/kg	
106-47-8	4-Chloroaniline	ND	610	ug/kg	
218-01-9	Chrysene	7470	310	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	310	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	310	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	310	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA102_4-8'	Date Sampled:	12/02/10
Lab Sample ID:	M96289-2	Date Received:	12/02/10
Matrix:	SO - Soil	Percent Solids:	81.7
Method:	SW846 8270C SW846 3510C		
Project:	Former Energy International Parcel, MA		

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	310	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	310	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	310	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	310	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	610	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	610	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	310	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	1190	310	ug/kg	
132-64-9	Dibenzofuran	1800	310	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	310	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	310	ug/kg	
84-66-2	Diethyl phthalate	ND	310	ug/kg	
131-11-3	Dimethyl phthalate	ND	310	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	310	ug/kg	
206-44-0	Fluoranthene	18900 ^a	3100	ug/kg	
86-73-7	Fluorene	3340	310	ug/kg	
118-74-1	Hexachlorobenzene	ND	310	ug/kg	
87-68-3	Hexachlorobutadiene	ND	310	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	610	ug/kg	
67-72-1	Hexachloroethane	ND	310	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	2380	310	ug/kg	
78-59-1	Isophorone	ND	310	ug/kg	
91-57-6	2-Methylnaphthalene	1020	310	ug/kg	
91-20-3	Naphthalene	1180	310	ug/kg	
98-95-3	Nitrobenzene	ND	310	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	310	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	310	ug/kg	
85-01-8	Phenanthrene	23000 ^a	3100	ug/kg	
129-00-0	Pyrene	11800	310	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	310	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	62%	61%	30-130%
4165-62-2	Phenol-d5	61%	58%	30-130%
118-79-6	2,4,6-Tribromophenol	73%	52%	30-130%
4165-60-0	Nitrobenzene-d5	69%	67%	30-130%
321-60-8	2-Fluorobiphenyl	73%	85%	30-130%
1718-51-0	Terphenyl-d14	67%	89%	30-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA102_4-8'		
Lab Sample ID:	M96289-2	Date Sampled:	12/02/10
Matrix:	SO - Soil	Date Received:	12/02/10
Method:	SW846 8270C SW846 3510C	Percent Solids:	81.7
Project:	Former Energy International Parcel, MA		

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
---------	----------	--------	----	-------	---

(a) Result is from Run# 2

ND = Not detected	J = Indicates an estimated value
RL = Reporting Limit	B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range	N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA102_4-8'	Date Sampled:	12/02/10
Lab Sample ID:	M96289-2	Date Received:	12/02/10
Matrix:	SO - Soil	Percent Solids:	81.7
Method:	MADEP VPH REV 1.1		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BH17834.D	1	12/08/10	WS	n/a	n/a	GBH929
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	9.90 g	11.0 ml	100 ul
Run #2			

Volatile TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C5- C8 Aliphatics (Unadj.)	ND	7900	ug/kg	
	C9- C12 Aliphatics (Unadj.)	167000	7900	ug/kg	
	C9- C10 Aromatics (Unadj.)	84500	7900	ug/kg	
	C5- C8 Aliphatics	ND	7900	ug/kg	
	C9- C12 Aliphatics	81800	7900	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	129%		70-130%
615-59-8	2,5-Dibromotoluene	130%		70-130%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA102_4-8'	Date Sampled:	12/02/10
Lab Sample ID:	M96289-2	Date Received:	12/02/10
Matrix:	SO - Soil	Percent Solids:	81.7
Method:	MADEP EPH REV 1.1 SW846 3545		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BI2784.D	1	12/15/10	JD	12/10/10	OP23590	GBI104
Run #2							

	Initial Weight	Final Volume
Run #1	11.9 g	2.0 ml
Run #2		

Extractable TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C11-C22 Aromatics (Unadj.)	417000	21000	ug/kg	
	C9-C18 Aliphatics	278000	10000	ug/kg	
	C19-C36 Aliphatics	167000	10000	ug/kg	
	C11-C22 Aromatics	334000	21000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	122%		40-140%
321-60-8	2-Fluorobiphenyl	100%		40-140%
580-13-2	2-Bromonaphthalene	78%		40-140%
3386-33-2	1-Chlorooctadecane	38% ^a		40-140%

(a) Outside control limits due to possible matrix interference. Confirmed by refractionation.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA102_4-8'

Lab Sample ID: M96289-2

Matrix: SO - Soil

Date Sampled: 12/02/10

Date Received: 12/02/10

Percent Solids: 81.7

Project: Former Energy International Parcel, MA

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Antimony ^a	< 1.8	1.8	mg/kg	2	12/06/10	12/07/10 DA	SW846 6010C ³	SW846 3050B ⁴
Arsenic	16.1	0.89	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ⁴
Barium	70.5	4.5	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ⁴
Beryllium	< 0.36	0.36	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ⁴
Cadmium	0.46	0.36	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ⁴
Chromium	12.3	0.89	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ⁴
Lead	210	0.89	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ⁴
Mercury	1.5	0.073	mg/kg	2	12/07/10	12/08/10 PY	SW846 7471A ²	SW846 7471A ⁵
Nickel	20.1	3.6	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ⁴
Selenium	< 0.89	0.89	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ⁴
Silver	< 0.45	0.45	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ⁴
Thallium	< 0.89	0.89	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ⁴
Vanadium	30.4	0.89	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ⁴
Zinc	239	1.8	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ⁴

(1) Instrument QC Batch: MA12497

(2) Instrument QC Batch: MA12500

(3) Instrument QC Batch: MA12501

(4) Prep QC Batch: MP16338

(5) Prep QC Batch: MP16345

(a) Elevated RL due to dilution required for matrix interference.

RL = Reporting Limit

Report of Analysis

Client Sample ID: HA102_4-8'**Lab Sample ID:** M96289-2**Matrix:** SO - Soil**Date Sampled:** 12/02/10**Date Received:** 12/02/10**Percent Solids:** 81.7**Project:** Former Energy International Parcel, MA

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Corrosivity as pH	7.4			1	12/03/10	MA	SW846 CHAP7
Cyanide Reactivity	< 1.8	1.8	mg/kg	1	12/08/10	BF	SW846 CHAP7
Ignitability (Flashpoint)	> 230		Deg. F	1	12/08/10	BF	SW846 1020
Redox Potential Vs H2	392		mv	1	12/03/10	MC	ASTM D1498-76M
Solids, Percent	81.7		%	1	12/03/10	HS	SM21 2540 B MOD.
Sulfide Reactivity	< 61	61	mg/kg	1	12/08/10	BF	SW846 CHAP7

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HA102_4-8'	Date Sampled:	12/02/10
Lab Sample ID:	M96289-2A	Date Received:	12/02/10
Matrix:	SO - Soil	Percent Solids:	81.7
Project:	Former Energy International Parcel, MA		

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	0.48	D008	5.0	0.010	mg/l	1	12/09/10	12/10/10 DA	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA12508
(2) Prep QC Batch: MP16354

RL = Reporting Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)

Report of Analysis

Client Sample ID:	HA101_0-4'	Date Sampled:	12/02/10
Lab Sample ID:	M96289-3	Date Received:	12/02/10
Matrix:	SO - Soil	Percent Solids:	89.0
Method:	SW846 8260B		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R18678.D	1	12/09/10	GK	n/a	n/a	MSR666
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	10.4 g	10.0 ml	100 ul
Run #2			

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	300	ug/kg	
71-43-2	Benzene	ND	30	ug/kg	
108-86-1	Bromobenzene	ND	300	ug/kg	
74-97-5	Bromochloromethane	ND	300	ug/kg	
75-27-4	Bromodichloromethane	ND	120	ug/kg	
75-25-2	Bromoform	ND	120	ug/kg	
74-83-9	Bromomethane	ND	120	ug/kg	
78-93-3	2-Butanone (MEK)	ND	300	ug/kg	
104-51-8	n-Butylbenzene	ND	300	ug/kg	
135-98-8	sec-Butylbenzene	ND	300	ug/kg	
98-06-6	tert-Butylbenzene	ND	300	ug/kg	
75-15-0	Carbon disulfide	ND	300	ug/kg	
56-23-5	Carbon tetrachloride	ND	120	ug/kg	
108-90-7	Chlorobenzene	ND	120	ug/kg	
75-00-3	Chloroethane	ND	300	ug/kg	
67-66-3	Chloroform	ND	120	ug/kg	
74-87-3	Chloromethane	ND	300	ug/kg	
95-49-8	o-Chlorotoluene	ND	300	ug/kg	
106-43-4	p-Chlorotoluene	ND	300	ug/kg	
108-20-3	Di-Isopropyl ether	ND	120	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	300	ug/kg	
124-48-1	Dibromochloromethane	ND	120	ug/kg	
106-93-4	1,2-Dibromoethane	ND	120	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	120	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	120	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	120	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	120	ug/kg	
75-34-3	1,1-Dichloroethane	ND	120	ug/kg	
107-06-2	1,2-Dichloroethane	ND	120	ug/kg	
75-35-4	1,1-Dichloroethene	ND	120	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	120	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	120	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA101_0-4'	Date Sampled:	12/02/10
Lab Sample ID:	M96289-3	Date Received:	12/02/10
Matrix:	SO - Soil	Percent Solids:	89.0
Method:	SW846 8260B		
Project:	Former Energy International Parcel, MA		

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
78-87-5	1,2-Dichloropropane	ND	120	ug/kg	
142-28-9	1,3-Dichloropropane	ND	300	ug/kg	
594-20-7	2,2-Dichloropropane	ND	300	ug/kg	
563-58-6	1,1-Dichloropropene	ND	300	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	120	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	120	ug/kg	
123-91-1	1,4-Dioxane	ND	1500	ug/kg	
60-29-7	Ethyl Ether	ND	300	ug/kg	
100-41-4	Ethylbenzene	ND	120	ug/kg	
87-68-3	Hexachlorobutadiene	ND	300	ug/kg	
591-78-6	2-Hexanone	ND	300	ug/kg	
98-82-8	Isopropylbenzene	ND	300	ug/kg	
99-87-6	p-Isopropyltoluene	ND	300	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	120	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	300	ug/kg	
74-95-3	Methylene bromide	ND	300	ug/kg	
75-09-2	Methylene chloride	ND	120	ug/kg	
91-20-3	Naphthalene	ND	300	ug/kg	
103-65-1	n-Propylbenzene	ND	300	ug/kg	
100-42-5	Styrene	ND	300	ug/kg	
994-05-8	tert-Amyl Methyl Ether	ND	300	ug/kg	
637-92-3	tert-Butyl Ethyl Ether	ND	120	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	300	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	120	ug/kg	
127-18-4	Tetrachloroethene	ND	120	ug/kg	
109-99-9	Tetrahydrofuran	ND	600	ug/kg	
108-88-3	Toluene	ND	300	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	300	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	300	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	120	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	120	ug/kg	
79-01-6	Trichloroethene	ND	120	ug/kg	
75-69-4	Trichlorofluoromethane	ND	120	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	300	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	300	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	300	ug/kg	
75-01-4	Vinyl chloride	ND	120	ug/kg	
	m,p-Xylene	ND	120	ug/kg	
95-47-6	o-Xylene	ND	120	ug/kg	
1330-20-7	Xylene (total)	ND	120	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA101_0-4'**Lab Sample ID:** M96289-3**Date Sampled:** 12/02/10**Matrix:** SO - Soil**Date Received:** 12/02/10**Method:** SW846 8260B**Percent Solids:** 89.0**Project:** Former Energy International Parcel, MA

VOA MCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	110%		70-130%
2037-26-5	Toluene-D8	115%		70-130%
460-00-4	4-Bromofluorobenzene	115%		70-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA101_0-4'	Date Sampled:	12/02/10
Lab Sample ID:	M96289-3	Date Received:	12/02/10
Matrix:	SO - Soil	Percent Solids:	89.0
Method:	SW846 8270C SW846 3510C		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	S19974.D	1	12/13/10	PR	12/06/10	OP23538	MSS826
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.1 g	1.0 ml
Run #2		

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
65-85-0	Benzoic acid	ND	560	ug/kg	
95-57-8	2-Chlorophenol	ND	280	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	560	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	560	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	560	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1100	ug/kg	
95-48-7	2-Methylphenol	ND	560	ug/kg	
	3&4-Methylphenol	ND	560	ug/kg	
88-75-5	2-Nitrophenol	ND	560	ug/kg	
100-02-7	4-Nitrophenol	ND	1100	ug/kg	
87-86-5	Pentachlorophenol	ND	560	ug/kg	
108-95-2	Phenol	ND	280	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	560	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	560	ug/kg	
83-32-9	Acenaphthene	ND	280	ug/kg	
208-96-8	Acenaphthylene	ND	280	ug/kg	
98-86-2	Acetophenone	ND	560	ug/kg	
62-53-3	Aniline	ND	560	ug/kg	
120-12-7	Anthracene	712	280	ug/kg	
56-55-3	Benzo(a)anthracene	1400	280	ug/kg	
50-32-8	Benzo(a)pyrene	1100	280	ug/kg	
205-99-2	Benzo(b)fluoranthene	944	280	ug/kg	
191-24-2	Benzo(g,h,i)perylene	624	280	ug/kg	
207-08-9	Benzo(k)fluoranthene	823	280	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	280	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	280	ug/kg	
91-58-7	2-Chloronaphthalene	ND	280	ug/kg	
106-47-8	4-Chloroaniline	ND	560	ug/kg	
218-01-9	Chrysene	1490	280	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	280	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	280	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	280	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA101_0-4'	Date Sampled:	12/02/10
Lab Sample ID:	M96289-3	Date Received:	12/02/10
Matrix:	SO - Soil	Percent Solids:	89.0
Method:	SW846 8270C SW846 3510C		
Project:	Former Energy International Parcel, MA		

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	280	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	280	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	280	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	280	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	560	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	560	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	280	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	280	ug/kg	
132-64-9	Dibenzofuran	ND	280	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	280	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	280	ug/kg	
84-66-2	Diethyl phthalate	ND	280	ug/kg	
131-11-3	Dimethyl phthalate	ND	280	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	280	ug/kg	
206-44-0	Fluoranthene	2730	280	ug/kg	
86-73-7	Fluorene	ND	280	ug/kg	
118-74-1	Hexachlorobenzene	ND	280	ug/kg	
87-68-3	Hexachlorobutadiene	ND	280	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	560	ug/kg	
67-72-1	Hexachloroethane	ND	280	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	654	280	ug/kg	
78-59-1	Isophorone	ND	280	ug/kg	
91-57-6	2-Methylnaphthalene	ND	280	ug/kg	
91-20-3	Naphthalene	294	280	ug/kg	
98-95-3	Nitrobenzene	ND	280	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	280	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	280	ug/kg	
85-01-8	Phenanthrene	2350	280	ug/kg	
129-00-0	Pyrene	2180	280	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	280	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	54%		30-130%
4165-62-2	Phenol-d5	58%		30-130%
118-79-6	2,4,6-Tribromophenol	74%		30-130%
4165-60-0	Nitrobenzene-d5	61%		30-130%
321-60-8	2-Fluorobiphenyl	74%		30-130%
1718-51-0	Terphenyl-d14	72%		30-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA101_0-4'	Date Sampled:	12/02/10
Lab Sample ID:	M96289-3	Date Received:	12/02/10
Matrix:	SO - Soil	Percent Solids:	89.0
Method:	MADEP VPH REV 1.1		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BH17835.D	1	12/08/10	WS	n/a	n/a	GBH929
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	10.4 g	11.0 ml	100 ul
Run #2			

Volatile TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C5- C8 Aliphatics (Unadj.)	ND	6500	ug/kg	
	C9- C12 Aliphatics (Unadj.)	ND	6500	ug/kg	
	C9- C10 Aromatics (Unadj.)	ND	6500	ug/kg	
	C5- C8 Aliphatics	ND	6500	ug/kg	
	C9- C12 Aliphatics	ND	6500	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	120%		70-130%
615-59-8	2,5-Dibromotoluene	113%		70-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA101_0-4'	Date Sampled:	12/02/10
Lab Sample ID:	M96289-3	Date Received:	12/02/10
Matrix:	SO - Soil	Percent Solids:	89.0
Method:	MADEP EPH REV 1.1 SW846 3545		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BI2725.D	1	12/13/10	JD	12/10/10	OP23590	GBI102
Run #2							

	Initial Weight	Final Volume
Run #1	11.4 g	2.0 ml
Run #2		

Extractable TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C11-C22 Aromatics (Unadj.)	104000	20000	ug/kg	
	C9-C18 Aliphatics	13300	9900	ug/kg	
	C19-C36 Aliphatics	67400	9900	ug/kg	
	C11-C22 Aromatics	88200	20000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	92%		40-140%
321-60-8	2-Fluorobiphenyl	88%		40-140%
580-13-2	2-Bromonaphthalene	66%		40-140%
3386-33-2	1-Chlorooctadecane	40%		40-140%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA101_0-4'

Lab Sample ID: M96289-3

Matrix: SO - Soil

Date Sampled: 12/02/10

Date Received: 12/02/10

Percent Solids: 89.0

Project: Former Energy International Parcel, MA

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Antimony	13.6	0.83	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Arsenic	10.3	0.83	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Barium	80.3	4.1	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Beryllium	0.40	0.33	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Cadmium	0.94	0.33	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Chromium	14.9	0.83	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Lead	346	0.83	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Mercury	1.1	0.070	mg/kg	2	12/07/10	12/08/10 PY	SW846 7471A ²	SW846 7471A ⁴
Nickel	18.5	3.3	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Selenium	< 0.83	0.83	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Silver	0.80	0.41	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Thallium	< 0.83	0.83	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Vanadium	24.7	0.83	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³
Zinc	616	1.7	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ³

(1) Instrument QC Batch: MA12497

(2) Instrument QC Batch: MA12500

(3) Prep QC Batch: MP16338

(4) Prep QC Batch: MP16345

RL = Reporting Limit

Report of Analysis

Client Sample ID: HA101_0-4'**Lab Sample ID:** M96289-3**Matrix:** SO - Soil**Project:** Former Energy International Parcel, MA**Date Sampled:** 12/02/10**Date Received:** 12/02/10**Percent Solids:** 89.0

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Corrosivity as pH	7.0			1	12/03/10	MA	SW846 CHAP7
Cyanide Reactivity	< 1.7	1.7	mg/kg	1	12/08/10	BF	SW846 CHAP7
Ignitability (Flashpoint)	> 230		Deg. F	1	12/08/10	BF	SW846 1020
Redox Potential Vs H2	425		mv	1	12/03/10	MC	ASTM D1498-76M
Solids, Percent	89		%	1	12/03/10	HS	SM21 2540 B MOD.
Sulfide Reactivity	< 56	56	mg/kg	1	12/08/10	BF	SW846 CHAP7

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HA101_0-4'		
Lab Sample ID:	M96289-3A	Date Sampled:	12/02/10
Matrix:	SO - Soil	Date Received:	12/02/10
		Percent Solids:	89.0
Project:	Former Energy International Parcel, MA		

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	0.22	D008	5.0	0.010	mg/l	1	12/09/10	12/10/10 DA	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA12508
(2) Prep QC Batch: MP16354

RL = Reporting Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)

Report of Analysis

Client Sample ID:	HA101_4-8'	Date Sampled:	12/02/10
Lab Sample ID:	M96289-4	Date Received:	12/02/10
Matrix:	SO - Soil	Percent Solids:	90.5
Method:	SW846 8260B		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R18691.D	1	12/09/10	GK	n/a	n/a	MSR666
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	10.6 g	10.0 ml	100 ul
Run #2			

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	290	ug/kg	
71-43-2	Benzene	43.6	29	ug/kg	
108-86-1	Bromobenzene	ND	290	ug/kg	
74-97-5	Bromochloromethane	ND	290	ug/kg	
75-27-4	Bromodichloromethane	ND	110	ug/kg	
75-25-2	Bromoform	ND	110	ug/kg	
74-83-9	Bromomethane	ND	110	ug/kg	
78-93-3	2-Butanone (MEK)	ND	290	ug/kg	
104-51-8	n-Butylbenzene	ND	290	ug/kg	
135-98-8	sec-Butylbenzene	ND	290	ug/kg	
98-06-6	tert-Butylbenzene	ND	290	ug/kg	
75-15-0	Carbon disulfide	ND	290	ug/kg	
56-23-5	Carbon tetrachloride	ND	110	ug/kg	
108-90-7	Chlorobenzene	ND	110	ug/kg	
75-00-3	Chloroethane	ND	290	ug/kg	
67-66-3	Chloroform	ND	110	ug/kg	
74-87-3	Chloromethane	ND	290	ug/kg	
95-49-8	o-Chlorotoluene	ND	290	ug/kg	
106-43-4	p-Chlorotoluene	ND	290	ug/kg	
108-20-3	Di-Isopropyl ether	ND	110	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	290	ug/kg	
124-48-1	Dibromochloromethane	ND	110	ug/kg	
106-93-4	1,2-Dibromoethane	ND	110	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	110	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	110	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	110	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	110	ug/kg	
75-34-3	1,1-Dichloroethane	ND	110	ug/kg	
107-06-2	1,2-Dichloroethane	ND	110	ug/kg	
75-35-4	1,1-Dichloroethene	ND	110	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	110	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	110	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA101_4-8'	Date Sampled:	12/02/10
Lab Sample ID:	M96289-4	Date Received:	12/02/10
Matrix:	SO - Soil	Percent Solids:	90.5
Method:	SW846 8260B		
Project:	Former Energy International Parcel, MA		

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
78-87-5	1,2-Dichloropropane	ND	110	ug/kg	
142-28-9	1,3-Dichloropropane	ND	290	ug/kg	
594-20-7	2,2-Dichloropropane	ND	290	ug/kg	
563-58-6	1,1-Dichloropropene	ND	290	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	110	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	110	ug/kg	
123-91-1	1,4-Dioxane	ND	1400	ug/kg	
60-29-7	Ethyl Ether	ND	290	ug/kg	
100-41-4	Ethylbenzene	ND	110	ug/kg	
87-68-3	Hexachlorobutadiene	ND	290	ug/kg	
591-78-6	2-Hexanone	ND	290	ug/kg	
98-82-8	Isopropylbenzene	ND	290	ug/kg	
99-87-6	p-Isopropyltoluene	ND	290	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	110	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	290	ug/kg	
74-95-3	Methylene bromide	ND	290	ug/kg	
75-09-2	Methylene chloride	ND	110	ug/kg	
91-20-3	Naphthalene	426	290	ug/kg	
103-65-1	n-Propylbenzene	ND	290	ug/kg	
100-42-5	Styrene	ND	290	ug/kg	
994-05-8	tert-Amyl Methyl Ether	ND	290	ug/kg	
637-92-3	tert-Butyl Ethyl Ether	ND	110	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	290	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	110	ug/kg	
127-18-4	Tetrachloroethene	ND	110	ug/kg	
109-99-9	Tetrahydrofuran	ND	570	ug/kg	
108-88-3	Toluene	ND	290	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	290	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	290	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	110	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	110	ug/kg	
79-01-6	Trichloroethene	ND	110	ug/kg	
75-69-4	Trichlorofluoromethane	ND	110	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	290	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	290	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	290	ug/kg	
75-01-4	Vinyl chloride	ND	110	ug/kg	
	m,p-Xylene	ND	110	ug/kg	
95-47-6	o-Xylene	ND	110	ug/kg	
1330-20-7	Xylene (total)	ND	110	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA101_4-8'	Date Sampled:	12/02/10
Lab Sample ID:	M96289-4	Date Received:	12/02/10
Matrix:	SO - Soil	Percent Solids:	90.5
Method:	SW846 8260B		
Project:	Former Energy International Parcel, MA		

VOA MCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		70-130%
2037-26-5	Toluene-D8	114%		70-130%
460-00-4	4-Bromofluorobenzene	114%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA101_4-8'	Date Sampled:	12/02/10
Lab Sample ID:	M96289-4	Date Received:	12/02/10
Matrix:	SO - Soil	Percent Solids:	90.5
Method:	SW846 8270C SW846 3510C		
Project:	Former Energy International Parcel, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	S19975.D	1	12/13/10	PR	12/06/10	OP23538	MSS826
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.5 g	1.0 ml
Run #2		

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
65-85-0	Benzoic acid	ND	540	ug/kg	
95-57-8	2-Chlorophenol	ND	270	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	540	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	540	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	540	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1100	ug/kg	
95-48-7	2-Methylphenol	ND	540	ug/kg	
	3&4-Methylphenol	ND	540	ug/kg	
88-75-5	2-Nitrophenol	ND	540	ug/kg	
100-02-7	4-Nitrophenol	ND	1100	ug/kg	
87-86-5	Pentachlorophenol	ND	540	ug/kg	
108-95-2	Phenol	ND	270	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	540	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	540	ug/kg	
83-32-9	Acenaphthene	537	270	ug/kg	
208-96-8	Acenaphthylene	740	270	ug/kg	
98-86-2	Acetophenone	ND	540	ug/kg	
62-53-3	Aniline	ND	540	ug/kg	
120-12-7	Anthracene	2550	270	ug/kg	
56-55-3	Benzo(a)anthracene	7540	270	ug/kg	
50-32-8	Benzo(a)pyrene	5800	270	ug/kg	
205-99-2	Benzo(b)fluoranthene	4340	270	ug/kg	
191-24-2	Benzo(g,h,i)perylene	2700	270	ug/kg	
207-08-9	Benzo(k)fluoranthene	4240	270	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	270	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	270	ug/kg	
91-58-7	2-Chloronaphthalene	ND	270	ug/kg	
106-47-8	4-Chloroaniline	ND	540	ug/kg	
218-01-9	Chrysene	6590	270	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	270	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	270	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	270	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA101_4-8'	Date Sampled:	12/02/10
Lab Sample ID:	M96289-4	Date Received:	12/02/10
Matrix:	SO - Soil	Percent Solids:	90.5
Method:	SW846 8270C SW846 3510C		
Project:	Former Energy International Parcel, MA		

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	270	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	270	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	270	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	270	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	540	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	540	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	270	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	1450	270	ug/kg	
132-64-9	Dibenzofuran	571	270	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	270	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	270	ug/kg	
84-66-2	Diethyl phthalate	ND	270	ug/kg	
131-11-3	Dimethyl phthalate	ND	270	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	270	ug/kg	
206-44-0	Fluoranthene	10700	270	ug/kg	
86-73-7	Fluorene	902	270	ug/kg	
118-74-1	Hexachlorobenzene	ND	270	ug/kg	
87-68-3	Hexachlorobutadiene	ND	270	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	540	ug/kg	
67-72-1	Hexachloroethane	ND	270	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	2900	270	ug/kg	
78-59-1	Isophorone	ND	270	ug/kg	
91-57-6	2-Methylnaphthalene	299	270	ug/kg	
91-20-3	Naphthalene	662	270	ug/kg	
98-95-3	Nitrobenzene	ND	270	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	270	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	270	ug/kg	
85-01-8	Phenanthrene	6180	270	ug/kg	
129-00-0	Pyrene	9050	270	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	270	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	59%		30-130%
4165-62-2	Phenol-d5	61%		30-130%
118-79-6	2,4,6-Tribromophenol	66%		30-130%
4165-60-0	Nitrobenzene-d5	63%		30-130%
321-60-8	2-Fluorobiphenyl	73%		30-130%
1718-51-0	Terphenyl-d14	72%		30-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA101_4-8'	Date Sampled:	12/02/10
Lab Sample ID:	M96289-4	Date Received:	12/02/10
Matrix:	SO - Soil	Percent Solids:	90.5
Method:	MADEP VPH REV 1.1		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BH17836.D	1	12/08/10	WS	n/a	n/a	GBH929
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	10.6 g	11.0 ml	100 ul
Run #2			

Volatile TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C5- C8 Aliphatics (Unadj.)	ND	6300	ug/kg	
	C9- C12 Aliphatics (Unadj.)	ND	6300	ug/kg	
	C9- C10 Aromatics (Unadj.)	ND	6300	ug/kg	
	C5- C8 Aliphatics	ND	6300	ug/kg	
	C9- C12 Aliphatics	ND	6300	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	113%		70-130%
615-59-8	2,5-Dibromotoluene	109%		70-130%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA101_4-8'	Date Sampled:	12/02/10
Lab Sample ID:	M96289-4	Date Received:	12/02/10
Matrix:	SO - Soil	Percent Solids:	90.5
Method:	MADEP EPH REV 1.1 SW846 3545		
Project:	Former Energy International Parcel, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BI2740.D	1	12/14/10	JD	12/10/10	OP23590	GBI102
Run #2							

	Initial Weight	Final Volume
Run #1	11.5 g	2.0 ml
Run #2		

Extractable TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C11-C22 Aromatics (Unadj.)	219000	19000	ug/kg	
	C9-C18 Aliphatics	ND	9600	ug/kg	
	C19-C36 Aliphatics	22500	9600	ug/kg	
	C11-C22 Aromatics	155000	19000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	117%		40-140%
321-60-8	2-Fluorobiphenyl	91%		40-140%
580-13-2	2-Bromonaphthalene	64%		40-140%
3386-33-2	1-Chlorooctadecane	46%		40-140%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HA101_4-8'

Lab Sample ID: M96289-4

Matrix: SO - Soil

Date Sampled: 12/02/10

Date Received: 12/02/10

Percent Solids: 90.5

Project: Former Energy International Parcel, MA

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Antimony	63.6	0.84	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ⁴
Arsenic	13.1	0.84	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ⁴
Barium	97.8	4.2	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ⁴
Beryllium	< 0.34	0.34	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ⁴
Cadmium	< 0.34	0.34	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ⁴
Chromium	13.1	0.84	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ⁴
Lead	1690	4.2	mg/kg	5	12/06/10	12/07/10 DA	SW846 6010C ³	SW846 3050B ⁴
Mercury	1.6	0.17	mg/kg	5	12/07/10	12/08/10 PY	SW846 7471A ²	SW846 7471A ⁵
Nickel	14.5	3.4	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ⁴
Selenium	< 0.84	0.84	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ⁴
Silver	5.2	0.42	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ⁴
Thallium	< 0.84	0.84	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ⁴
Vanadium	21.1	0.84	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ⁴
Zinc	340	1.7	mg/kg	1	12/06/10	12/06/10 DA	SW846 6010C ¹	SW846 3050B ⁴

(1) Instrument QC Batch: MA12497

(2) Instrument QC Batch: MA12500

(3) Instrument QC Batch: MA12501

(4) Prep QC Batch: MP16338

(5) Prep QC Batch: MP16345

RL = Reporting Limit

Report of Analysis

Client Sample ID: HA101_4-8'**Lab Sample ID:** M96289-4**Matrix:** SO - Soil**Date Sampled:** 12/02/10**Date Received:** 12/02/10**Percent Solids:** 90.5**Project:** Former Energy International Parcel, MA

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Corrosivity as pH	7.2			1	12/03/10	MA	SW846 CHAP7
Cyanide Reactivity	< 1.7	1.7	mg/kg	1	12/08/10	BF	SW846 CHAP7
Ignitability (Flashpoint)	> 230		Deg. F	1	12/08/10	BF	SW846 1020
Redox Potential Vs H2	429		mv	1	12/03/10	MC	ASTM D1498-76M
Solids, Percent	90.5		%	1	12/03/10	HS	SM21 2540 B MOD.
Sulfide Reactivity	< 55	55	mg/kg	1	12/08/10	BF	SW846 CHAP7

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HA101_4-8'	Date Sampled:	12/02/10
Lab Sample ID:	M96289-4A	Date Received:	12/02/10
Matrix:	SO - Soil	Percent Solids:	90.5
Project:	Former Energy International Parcel, MA		

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	1.9	D008	5.0	0.010	mg/l	1	12/09/10	12/09/10 DA	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA12508
(2) Prep QC Batch: MP16354

RL = Reporting Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Parameter Certifications (MA)
- Chain of Custody
- MCP Form
- EPH Form
- VPH Form
- Sample Tracking Chronicle

Parameter Certification Exceptions

Job Number: M96289
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

The following parameters included in this report are exceptions to NELAC certification.
The certification status of each is indicated below.

Parameter	CAS#	Method	Mat	Certification Status
tert-Amyl Methyl Ether	994-05-8	SW846 8260B	SO	Certified by SOP MMS105/GC-MS
tert-Butyl Ethyl Ether	637-92-3	SW846 8260B	SO	Certified by SOP MMS105/GC-MS
Di-Isopropyl ether	108-20-3	SW846 8260B	SO	Certified by SOP MMS105/GC-MS
Tetrahydrofuran	109-99-9	SW846 8260B	SO	Certified by SOP MMS105/GC-MS

4.1
4



Massachusetts Department
of Environmental Protection
Bureau of Waste Site Cleanup

WSC-CAM

Exhibit VII A

July 1, 2010

Revision No. 1

Final

Page 13 of 38

Exhibit VII A-2: MassDEP Analytical Protocol Certification Form

MassDEP Analytical Protocol Certification Form

Laboratory Name: Accutest Laboratories of New England

Project #: M96289

Project Location: Former Energy International Parcel, MA

MADEP RTN

None

This form provides certifications for the following data set: list Laboratory Sample ID Numbers(s)
M96289-1, M96289-2, M96289-2A, M96289-3, M96289-3A, M96289-4, M96289-4A, M96289-4AD
M96289-4AS, M96289-4D, M96289-4S

Test method: Refer to case narrative.

Matrices: Groundwater/Surface Water () Soil/Sediment (X) Drinking Water () Air () Other ()

CAM Protocol (check all that apply below):

8260 VOC (X) CAM IIA	7470/7471 Hg (X) CAM III B	MassDEP VPH (X) CAM IV A	8081 Pesticides () CAM V B	7196 Hex Cr () CAM VI B	Mass DEP APH () CAM IX A
8270 SVOC (X) CAM II B	7010 Metals () CAM III C	MassDEP EPH (X) CAM IV B	8151 Herbicides () CAM V C	8330 Explosives () CAM VIII A	TO-15 VOC () CAM IX B
6010 Metals (X) CAM III A	6020 Metals () CAM III D	8082 PCB () CAM V A	9014 Total Cyanide/PAC () CAM VI A	6860 Perchlorate () CAM VIII B	

Affirmative Responses to Questions A Through F are required for "Presumptive Certainty status"

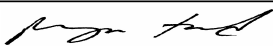
A	Were all samples received in a condition consistent with those described on the Chain-of Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/> No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/> No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/> No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/> No
E	VPH, EPH, APH, and TO-15 only: a. VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	Yes Yes	<input type="checkbox"/> <input type="checkbox"/> No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/> No

Responses to questions G, H, and I below is required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/> No ¹
Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data useability and representativeness requirements described in 310 CMR 40.1056(2)(k) and WSC-07-350.				
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/> No ¹
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/> No ¹

All Negative responses must be addressed in an attached Environmental Laboratory case narrative.

I the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Signature: 

Position: Laboratory Director

Printed Name: Reza Tand

Date: 12/22/2010

MADEP EPH FORM

Matrix	Aqueous <input type="checkbox"/>	Soil <input checked="" type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>	
Aqueous Preservative	N/A <input checked="" type="checkbox"/>	pH <= 2 <input type="checkbox"/>	pH > 2 <input type="checkbox"/>	
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg. C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Rec'd at 1.9 deg C.
Extraction Method	SW846 3545			
Method for Ranges:	MADEP EPH REV 1.1		Client ID:	HA102_0-4'
Method for Targets:	MADEP EPH REV 1.1		Lab ID:	M96289-1
EPH Surrogate Stds.	Aliphatic: 1-Chlorooctadecane		Date Collected:	12/2/2010
	Aromatic: o-Terphenyl		Date Received:	12/2/2010
EPH Fractionation	2-Fluorobiphenyl		Date Extracted:	12/10/2010
Surrogate Standards.	2-Bromonaphthalene		First Date Run:	12/15/2010
			Last Date Run:	N/A
			% Solids:	88.6
			Low Dilution:	1
			High Dilution:	N/A
Unadjusted Ranges	CAS #	Units	Result	RDL
C11-C22 Aromatics (Unadj.)		ug/kg	747000 ^A	20000

Adjusted Ranges				
C9-C18 Aliphatics	ug/kg	1410000 ^A	10000	
C19-C36 Aliphatics	ug/kg	710000 ^A	10000	
C11-C22 Aromatics	ug/kg	739000 ^C	20000	
Surrogate Recoveries		Acceptance Range		
1-Chlorooctadecane	%	49	40-140 %	
o-Terphenyl	%	78	40-140 %	
2-Fluorobiphenyl	%	127	40-140 %	
2-Bromonaphthalene	%	231 ^F	40-140 %	
Footnotes				
A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range				
C Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes				
F Outside control limits due to possible matrix interference. Confirmed by refractation.				
Z A 'J' qualifier indicates an estimated value				

Were all QA/QC procedures REQUIRED by the EPH Method followed? ☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved? ☐ Yes ☒ No- Details Attached

Were any significant modifications made to the EPH method, as specified in Sect. 11.3? ☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature 

Postition Laboratory Director

Printed Name Reza Tand

Date 12/22/2010

MADEP EPH FORM

Matrix	Aqueous <input type="checkbox"/>	Soil <input checked="" type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>	
Aqueous Preservative	N/A <input checked="" type="checkbox"/>	pH <= 2 <input type="checkbox"/>	pH > 2 <input type="checkbox"/>	
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg. C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Rec'd at 1.9 deg C.
Extraction Method	SW846 3545			
Method for Ranges:	MADEP EPH REV 1.1		Client ID:	HA102_4-8'
Method for Targets:	MADEP EPH REV 1.1		Lab ID:	M96289-2
EPH Surrogate Stds.	Aliphatic: 1-Chlorooctadecane		Date Collected:	12/2/2010
	Aromatic: o-Terphenyl		Date Received:	12/2/2010
EPH Fractionation	2-Fluorobiphenyl		Date Extracted:	12/10/2010
Surrogate Standards.	2-Bromonaphthalene		First Date Run:	12/15/2010
			Last Date Run:	N/A
			% Solids:	81.7
			Low Dilution:	1
			High Dilution:	N/A
Unadjusted Ranges	CAS #	Units	Result	RDL
C11-C22 Aromatics (Unadj.)		ug/kg	417000 ^A	21000

Adjusted Ranges				
C9-C18 Aliphatics	ug/kg	278000 ^A	10000	
C19-C36 Aliphatics	ug/kg	167000 ^A	10000	
C11-C22 Aromatics	ug/kg	334000 ^C	21000	
Surrogate Recoveries			Acceptance Range	
1-Chlorooctadecane	%	38 ^F	40-140 %	
o-Terphenyl	%	122	40-140 %	
2-Fluorobiphenyl	%	100	40-140 %	
2-Bromonaphthalene	%	78	40-140 %	
Footnotes				
A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range				
C Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes				
F Outside control limits due to possible matrix interference. Confirmed by refractation.				
Z A 'J' qualifier indicates an estimated value				

Were all QA/QC procedures REQUIRED by the EPH Method followed? ☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved? ☐ Yes ☒ No- Details Attached

Were any significant modifications made to the EPH method, as specified in Sect. 11.3? ☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature 

Postition Laboratory Director

Printed Name Reza Tand

Date 12/22/2010

MADEP EPH FORM

Matrix	Aqueous <input type="checkbox"/>	Soil <input checked="" type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>	
Aqueous Preservative	N/A <input checked="" type="checkbox"/>	pH <= 2 <input type="checkbox"/>	pH > 2 <input type="checkbox"/>	
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg. C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Rec'd at 1.9 deg C.
Extraction Method	SW846 3545			
Method for Ranges:	MADEP EPH REV 1.1		Client ID:	HA101_0-4'
Method for Targets:	MADEP EPH REV 1.1		Lab ID:	M96289-3
EPH Surrogate Stds.	Aliphatic: 1-Chlorooctadecane		Date Collected:	12/2/2010
	Aromatic: o-Terphenyl		Date Received:	12/2/2010
EPH Fractionation	2-Fluorobiphenyl		Date Extracted:	12/10/2010
Surrogate Standards.	2-Bromonaphthalene		First Date Run:	12/13/2010
			Last Date Run:	N/A
			% Solids:	89
			Low Dilution:	1
			High Dilution:	N/A
Unadjusted Ranges	CAS #	Units	Result	RDL
C11-C22 Aromatics (Unadj.)		ug/kg	104000 ^A	20000

Adjusted Ranges				
C9-C18 Aliphatics	ug/kg	13300 ^A	9900	
C19-C36 Aliphatics	ug/kg	67400 ^A	9900	
C11-C22 Aromatics	ug/kg	88200 ^C	20000	
Surrogate Recoveries		Acceptance Range		
1-Chlorooctadecane	%	40	40-140 %	
o-Terphenyl	%	92	40-140 %	
2-Fluorobiphenyl	%	88	40-140 %	
2-Bromonaphthalene	%	66	40-140 %	
Footnotes				
A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range				
C Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes				
Z A 'J' qualifier indicates an estimated value				

Were all QA/QC procedures REQUIRED by the EPH Method followed? ☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved? ☒ Yes ☐ No- Details Attached

Were any significant modifications made to the EPH method, as specified in Sect. 11.3? ☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature 

Postition Laboratory Director

Printed Name Reza Tand

Date 12/22/2010

MADEP EPH FORM

Matrix	Aqueous <input type="checkbox"/>	Soil <input checked="" type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>	
Aqueous Preservative	N/A <input checked="" type="checkbox"/>	pH <= 2 <input type="checkbox"/>	pH > 2 <input type="checkbox"/>	
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg. C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Rec'd at 1.9 deg C.
Extraction Method	SW846 3545			
Method for Ranges:	MADEP EPH REV 1.1		Client ID:	HA101_4-8'
Method for Targets:	MADEP EPH REV 1.1		Lab ID:	M96289-4
EPH Surrogate Stds.	Aliphatic: 1-Chlorooctadecane		Date Collected:	12/2/2010
	Aromatic: o-Terphenyl		Date Received:	12/2/2010
EPH Fractionation	2-Fluorobiphenyl		Date Extracted:	12/10/2010
Surrogate Standards.	2-Bromonaphthalene		First Date Run:	12/14/2010
			Last Date Run:	N/A
			% Solids:	90.5
			Low Dilution:	1
			High Dilution:	N/A
Unadjusted Ranges	CAS #	Units	Result	RDL
C11-C22 Aromatics (Unadj.)		ug/kg	219000 ^A	19000

Adjusted Ranges				
C9-C18 Aliphatics	ug/kg	ND ^A	9600	
C19-C36 Aliphatics	ug/kg	22500 ^A	9600	
C11-C22 Aromatics	ug/kg	155000 ^C	19000	
Surrogate Recoveries			Acceptance Range	
1-Chlorooctadecane	%	46	40-140 %	
o-Terphenyl	%	117	40-140 %	
2-Fluorobiphenyl	%	91	40-140 %	
2-Bromonaphthalene	%	64	40-140 %	
Footnotes				
A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range				
C Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes				
Z A 'J' qualifier indicates an estimated value				

Were all QA/QC procedures REQUIRED by the EPH Method followed? ☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved? ☒ Yes ☐ No- Details Attached

Were any significant modifications made to the EPH method, as specified in Sect. 11.3? ☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature 

Postition Laboratory Director

Printed Name Reza Tand

Date 12/22/2010

MADEP VPH FORM

Matrix	Aqueous <input type="checkbox"/>	Soil <input checked="" type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>		
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>			
Aqueous Preservatives	N/A <input checked="" type="checkbox"/>	pH <= 2 <input type="checkbox"/>	pH > 2 <input type="checkbox"/>			
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg. C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Rec'd at 1.9 deg C.		
Methanol	Methanol Covering Soil. (mL Methanol/g soil: 1:1 +/- 25%)					
Method for Ranges:	MADEP VPH REV 1.1		Client ID: HA102_0-4 ¹	Lab ID: M96289-1		
Method for Target Analytes:	MADEP VPH REV 1.1		Date Collected: 12/2/2010	Date Received: 12/2/2010		
VPH Surrogate Standards			Date Extracted:	First Date Run:		
PID: 2,5-Dibromotoluene			N/A	12/8/2010		
FID: 2,5-Dibromotoluene			% Solids:	Low Dilution:		
			88.6	1		
				High Dilution:		
				N/A		
Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)		N/A	ug/kg	ND ^A	58000	
C9- C10 Aromatics (Unadj.)		N/A	ug/kg	194000 ^A	58000	
C9- C12 Aliphatics (Unadj.)		N/A	ug/kg	423000 ^A	58000	
Adjusted Ranges						
C5- C8 Aliphatics		N/A	ug/kg	ND ^B	58000	
C9- C12 Aliphatics		N/A	ug/kg	228000 ^D	58000	
Surrogate Recoveries					Acceptance Range	
FID:2,5-Dibromotoluene			%	223 ^E	70-130 %	
PID:2,5-Dibromotoluene			%	134 ^E	70-130 %	
FID:2,5-Dibromotoluene			%	248 ^E	70-130 %	
PID:2,5-Dibromotoluene			%	176 ^E	70-130 %	
Footnotes						
A	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range					
B	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range.					
D	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C9-C12 aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C9-C10 Aromatic Hydrocarbons.					
E	Outside control limits due to matrix interference. Confirmed by reanalysis.					
Z	A 'J' qualifier indicates an estimated value					

Were all QA/QC procedures REQUIRED by the VPH Method followed?

☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved?

☐ Yes ☒ No- Details Attached

Were any significant modifications made to the VPH method, as specified in Sect. 11.3?

☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature

Postition

Laboratory Director

Printed Name

Reza Tand

Date

12/22/2010

MADEP VPH FORM

Matrix	Aqueous <input type="checkbox"/>	Soil <input checked="" type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>		
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>			
Aqueous Preservatives	N/A <input checked="" type="checkbox"/>	pH <= 2 <input type="checkbox"/>	pH > 2 <input type="checkbox"/>			
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg. C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Rec'd at 1.9 deg C.		
Methanol	Methanol Covering Soil. (mL Methanol/g soil: 1:1 +/- 25%)					
Method for Ranges:	MADEP VPH REV 1.1		Client ID: HA102_4-8 ¹	Lab ID: M96289-2		
Method for Target Analytes:	MADEP VPH REV 1.1		Date Collected: 12/2/2010	Date Received: 12/2/2010		
VPH Surrogate Standards			Date Extracted:	First Date Run:		
PID: 2,5-Dibromotoluene			N/A	12/8/2010		
FID: 2,5-Dibromotoluene			% Solids:	Low Dilution:		
			81.7	1		
				High Dilution:		
				N/A		
Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)		N/A	ug/kg	ND ^A	7900	
C9- C10 Aromatics (Unadj.)		N/A	ug/kg	84500 ^A	7900	
C9- C12 Aliphatics (Unadj.)		N/A	ug/kg	167000 ^A	7900	
Adjusted Ranges						
C5- C8 Aliphatics		N/A	ug/kg	ND ^B	7900	
C9- C12 Aliphatics		N/A	ug/kg	81800 ^D	7900	
Surrogate Recoveries					Acceptance Range	
FID:2,5-Dibromotoluene			%	129	70-130 %	
PID:2,5-Dibromotoluene			%	130	70-130 %	
Footnotes						
A	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range					
B	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range.					
D	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C9-C12 aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C9-C10 Aromatic Hydrocarbons.					
Z	A "J" qualifier indicates an estimated value					

Were all QA/QC procedures REQUIRED by the VPH Method followed?

☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved?

☒ Yes ☐ No- Details Attached

Were any significant modifications made to the VPH method, as specified in Sect. 11.3?

☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature

Postition

Laboratory Director

Printed Name

Reza Tand

Date

12/22/2010

MADEP VPH FORM

Matrix	Aqueous <input type="checkbox"/>	Soil <input checked="" type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>	
Aqueous Preservatives	N/A <input checked="" type="checkbox"/>	pH <= 2 <input type="checkbox"/>	pH > 2 <input type="checkbox"/>	
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg. C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Rec'd at 1.9 deg C.
Methanol	Methanol Covering Soil. (mL Methanol/g soil: 1:1 +/- 25%)			
Method for Ranges:	MADEP VPH REV 1.1		Client ID: HA101_0-4 ¹	Lab ID: M96289-3
Method for Target Analytes:	MADEP VPH REV 1.1		Date Collected: 12/2/2010	Date Received: 12/2/2010
VPH Surrogate Standards			Date Extracted:	First Date Run:
PID: 2,5-Dibromotoluene			N/A	12/8/2010
FID: 2,5-Dibromotoluene			% Solids:	Low Dilution:
			89	1
				Last Date Run:
				N/A
				High Dilution:
				N/A

Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)		N/A	ug/kg	ND ^A	6500	
C9- C10 Aromatics (Unadj.)		N/A	ug/kg	ND ^A	6500	
C9- C12 Aliphatics (Unadj.)		N/A	ug/kg	ND ^A	6500	

Adjusted Ranges	Units	Result	RDL
C5- C8 Aliphatics	ug/kg	ND ^B	6500
C9- C12 Aliphatics	ug/kg	ND ^D	6500

Surrogate Recoveries	%	Acceptance Range
FID:2,5-Dibromotoluene	120	70-130 %
PID:2,5-Dibromotoluene	113	70-130 %

Footnotes

A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range

B Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range.

D Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C9-C12 aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C9-C10 Aromatic Hydrocarbons.

Z A "J" qualifier indicates an estimated value

Were all QA/QC procedures REQUIRED by the VPH Method followed?

☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved?

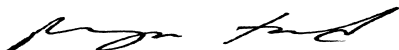
☒ Yes ☐ No- Details Attached

Were any significant modifications made to the VPH method, as specified in Sect. 11.3?

☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature



Postition

Laboratory Director

Printed Name

Reza Tand

Date

12/22/2010

MADEP VPH FORM

Matrix	Aqueous <input type="checkbox"/>	Soil <input checked="" type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>	
Aqueous Preservatives	N/A <input checked="" type="checkbox"/>	pH <= 2 <input type="checkbox"/>	pH > 2 <input type="checkbox"/>	
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg. C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Rec'd at 1.9 deg C.
Methanol	Methanol Covering Soil. (mL Methanol/g soil: 1:1 +/- 25%)			
Method for Ranges:	MADEP VPH REV 1.1		Client ID: HA101_4-8 ¹	Lab ID: M96289-4
Method for Target Analytes:	MADEP VPH REV 1.1		Date Collected: 12/2/2010	Date Received: 12/2/2010
VPH Surrogate Standards			Date Extracted:	First Date Run:
PID: 2,5-Dibromotoluene			N/A	12/8/2010
FID: 2,5-Dibromotoluene			% Solids:	Low Dilution:
			90.5	1
				Last Date Run:
				N/A
				High Dilution:
				N/A

Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)		N/A	ug/kg	ND ^A	6300	
C9- C10 Aromatics (Unadj.)		N/A	ug/kg	ND ^A	6300	
C9- C12 Aliphatics (Unadj.)		N/A	ug/kg	ND ^A	6300	

Adjusted Ranges	Units	Result	RDL
C5- C8 Aliphatics	ug/kg	ND ^B	6300
C9- C12 Aliphatics	ug/kg	ND ^D	6300

Surrogate Recoveries	%	Acceptance Range
FID:2,5-Dibromotoluene	113	70-130 %
PID:2,5-Dibromotoluene	109	70-130 %

Footnotes

A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range

B Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range.

D Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C9-C12 aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C9-C10 Aromatic Hydrocarbons.

Z A "J" qualifier indicates an estimated value

Were all QA/QC procedures REQUIRED by the VPH Method followed?

☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved?

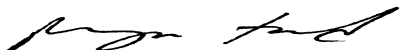
☒ Yes ☐ No- Details Attached

Were any significant modifications made to the VPH method, as specified in Sect. 11.3?

☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature



Postition

Laboratory Director

Printed Name

Reza Tand

Date

12/22/2010

Internal Sample Tracking Chronicle

Haley & Aldrich

Job No: M96289

Former Energy International Parcel, MA
Project No: 06318-502

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M96289-1 Collected: 02-DEC-10 08:50 By: MD Received: 02-DEC-10 By: JB HA102_0-4'						
M96289-1	ASTM D1498-76M	03-DEC-10	MC			EH
M96289-1	SM21 2540 B MOD.	03-DEC-10	HS			% SOL
M96289-1	SW846 CHAP7	03-DEC-10	MA			CORR
M96289-1	SW846 6010C	06-DEC-10 20:45	DA	06-DEC-10	EM	AG,AS,BA,BE,CD,CR,NI,PB,SB,SE,TL,V,ZN
M96289-1	SW846 CHAP7	08-DEC-10	BF	08-DEC-10	BF	CREAC,SREAC
M96289-1	SW846 CHAP7	08-DEC-10	BF	08-DEC-10	BF	CREAC,SREAC
M96289-1	SW846 1020	08-DEC-10	BF			IGN
M96289-1	MADEP VPH REV 1.1	08-DEC-10 03:42	WS			VMAVPHR
M96289-1	SW846 7471A	08-DEC-10 13:27	PY	07-DEC-10	EM	HG
M96289-1	MADEP VPH REV 1.1	08-DEC-10 14:24	WS			VMAVPHR
M96289-1	SW846 8260B	09-DEC-10 22:34	GK			V8260MCP
M96289-1	SW846 8270C	13-DEC-10 21:28	PR	06-DEC-10	MEW	AB8270MCP
M96289-1	MADEP EPH REV 1.1	15-DEC-10 19:59	JD	10-DEC-10	AF	BMAEPHR
M96289-2 Collected: 02-DEC-10 09:30 By: MD Received: 02-DEC-10 By: JB HA102_4-8'						
M96289-2	ASTM D1498-76M	03-DEC-10	MC			EH
M96289-2	SM21 2540 B MOD.	03-DEC-10	HS			% SOL
M96289-2	SW846 CHAP7	03-DEC-10	MA			CORR
M96289-2	SW846 6010C	06-DEC-10 20:49	DA	06-DEC-10	EM	AG,AS,BA,BE,CD,CR,NI,PB,SE,TL,V,ZN
M96289-2	SW846 6010C	07-DEC-10 14:17	DA	06-DEC-10	EM	SB
M96289-2	SW846 CHAP7	08-DEC-10	BF	08-DEC-10	BF	CREAC,SREAC
M96289-2	SW846 CHAP7	08-DEC-10	BF	08-DEC-10	BF	CREAC,SREAC
M96289-2	SW846 1020	08-DEC-10	BF			IGN
M96289-2	MADEP VPH REV 1.1	08-DEC-10 04:21	WS			VMAVPHR
M96289-2	SW846 7471A	08-DEC-10 14:12	PY	07-DEC-10	EM	HG
M96289-2	SW846 8260B	09-DEC-10 16:42	GK			V8260MCP
M96289-2	SW846 8270C	13-DEC-10 21:57	PR	06-DEC-10	MEW	AB8270MCP
M96289-2	MADEP EPH REV 1.1	15-DEC-10 21:11	JD	10-DEC-10	AF	BMAEPHR
M96289-2	SW846 8270C	16-DEC-10 05:55	PR	06-DEC-10	MEW	AB8270MCP
M96289-3 Collected: 02-DEC-10 12:00 By: MD Received: 02-DEC-10 By: JB HA101_0-4'						

Internal Sample Tracking Chronicle

Haley & Aldrich

Job No: M96289

Former Energy International Parcel, MA
Project No: 06318-502

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M96289-3	ASTM D1498-76M	03-DEC-10	MC			EH
M96289-3	SM21 2540 B MOD.	03-DEC-10	HS			%SOL
M96289-3	SW846 CHAP7	03-DEC-10	MA			CORR
M96289-3	SW846 6010C	06-DEC-10 20:54	DA	06-DEC-10	EM	AG,AS,BA,BE,CD,CR,NI,PB,SB,SE,TL,V,ZN
M96289-3	SW846 CHAP7	08-DEC-10	BF	08-DEC-10	BF	CREAC,SREAC
M96289-3	SW846 1020	08-DEC-10	BF			IGN
M96289-3	SW846 CHAP7	08-DEC-10	BF	08-DEC-10	BF	CREAC,SREAC
M96289-3	MADEP VPH REV 1.1	08-DEC-10 05:01	WS			VMAVPHR
M96289-3	SW846 7471A	08-DEC-10 14:14	PY	07-DEC-10	EM	HG
M96289-3	SW846 8260B	09-DEC-10 16:15	GK			V8260MCP
M96289-3	MADEP EPH REV 1.1	13-DEC-10 18:37	JD	10-DEC-10	AF	BMAEPHR
M96289-3	SW846 8270C	13-DEC-10 22:26	PR	06-DEC-10	MEW	AB8270MCP
M96289-4 Collected: 02-DEC-10 12:50 By: MD Received: 02-DEC-10 By: JB HA101_4-8'						
M96289-4	ASTM D1498-76M	03-DEC-10	MC			EH
M96289-4	SM21 2540 B MOD.	03-DEC-10	HS			%SOL
M96289-4	SW846 CHAP7	03-DEC-10	MA			CORR
M96289-4	SW846 6010C	06-DEC-10 20:15	DA	06-DEC-10	EM	AG,AS,BA,BE,CD,CR,NI,SB,SE,TL,V,ZN
M96289-4	SW846 6010C	07-DEC-10 14:22	DA	06-DEC-10	EM	PB
M96289-4	SW846 CHAP7	08-DEC-10	BF	08-DEC-10	BF	CREAC,SREAC
M96289-4	SW846 CHAP7	08-DEC-10	BF	08-DEC-10	BF	CREAC,SREAC
M96289-4	SW846 1020	08-DEC-10	BF			IGN
M96289-4	MADEP VPH REV 1.1	08-DEC-10 05:41	WS			VMAVPHR
M96289-4	SW846 7471A	08-DEC-10 13:51	PY	07-DEC-10	EM	HG
M96289-4	SW846 8260B	09-DEC-10 22:07	GK			V8260MCP
M96289-4	SW846 8270C	13-DEC-10 22:55	PR	06-DEC-10	MEW	AB8270MCP
M96289-4	MADEP EPH REV 1.1	14-DEC-10 03:44	JD	10-DEC-10	AF	BMAEPHR
M96289-2A Collected: 02-DEC-10 09:30 By: MD Received: 02-DEC-10 By: JB HA102_4-8'						
M96289-2A	SW846 6010C	10-DEC-10 00:39	DA	09-DEC-10	EM	EPB
M96289-3A Collected: 02-DEC-10 12:00 By: MD Received: 02-DEC-10 By: JB HA101_0-4'						

Internal Sample Tracking Chronicle

Haley & Aldrich

Job No: M96289

Former Energy International Parcel, MA
Project No: 06318-502

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M96289-3A	SW846 6010C	10-DEC-10 00:43	DA	09-DEC-10	EM	EPB
M96289-4A Collected: 02-DEC-10 12:50 By: MD Received: 02-DEC-10 By: JB HA101_4-8'						
M96289-4A	SW846 6010C	09-DEC-10 23:31	DA	09-DEC-10	EM	EPB

GC/MS Volatiles

5

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Page 1 of 3

Job Number: M96289
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSR666-MB	R18672A.D	1	12/09/10	GK	n/a	n/a	MSR666

The QC reported here applies to the following samples:

Method: SW846 8260B

M96289-1, M96289-2, M96289-3, M96289-4

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	250	ug/kg	
71-43-2	Benzene	ND	25	ug/kg	
108-86-1	Bromobenzene	ND	250	ug/kg	
74-97-5	Bromochloromethane	ND	250	ug/kg	
75-27-4	Bromodichloromethane	ND	100	ug/kg	
75-25-2	Bromoform	ND	100	ug/kg	
74-83-9	Bromomethane	ND	100	ug/kg	
78-93-3	2-Butanone (MEK)	ND	250	ug/kg	
104-51-8	n-Butylbenzene	ND	250	ug/kg	
135-98-8	sec-Butylbenzene	ND	250	ug/kg	
98-06-6	tert-Butylbenzene	ND	250	ug/kg	
75-15-0	Carbon disulfide	ND	250	ug/kg	
56-23-5	Carbon tetrachloride	ND	100	ug/kg	
108-90-7	Chlorobenzene	ND	100	ug/kg	
75-00-3	Chloroethane	ND	250	ug/kg	
67-66-3	Chloroform	ND	100	ug/kg	
74-87-3	Chloromethane	ND	250	ug/kg	
95-49-8	o-Chlorotoluene	ND	250	ug/kg	
106-43-4	p-Chlorotoluene	ND	250	ug/kg	
108-20-3	Di-Isopropyl ether	ND	100	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	250	ug/kg	
124-48-1	Dibromochloromethane	ND	100	ug/kg	
106-93-4	1,2-Dibromoethane	ND	100	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	100	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	100	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	100	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	100	ug/kg	
75-34-3	1,1-Dichloroethane	ND	100	ug/kg	
107-06-2	1,2-Dichloroethane	ND	100	ug/kg	
75-35-4	1,1-Dichloroethene	ND	100	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	100	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	100	ug/kg	
78-87-5	1,2-Dichloropropane	ND	100	ug/kg	
142-28-9	1,3-Dichloropropane	ND	250	ug/kg	
594-20-7	2,2-Dichloropropane	ND	250	ug/kg	
563-58-6	1,1-Dichloropropene	ND	250	ug/kg	

Method Blank Summary

Page 2 of 3

Job Number: M96289
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSR666-MB	R18672A.D	1	12/09/10	GK	n/a	n/a	MSR666

The QC reported here applies to the following samples:

Method: SW846 8260B

M96289-1, M96289-2, M96289-3, M96289-4

CAS No.	Compound	Result	RL	Units	Q
10061-01-5	cis-1,3-Dichloropropene	ND	100	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	100	ug/kg	
123-91-1	1,4-Dioxane	ND	1300	ug/kg	
60-29-7	Ethyl Ether	ND	250	ug/kg	
100-41-4	Ethylbenzene	ND	100	ug/kg	
87-68-3	Hexachlorobutadiene	ND	250	ug/kg	
591-78-6	2-Hexanone	ND	250	ug/kg	
98-82-8	Isopropylbenzene	ND	250	ug/kg	
99-87-6	p-Isopropyltoluene	ND	250	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	100	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	250	ug/kg	
74-95-3	Methylene bromide	ND	250	ug/kg	
75-09-2	Methylene chloride	ND	100	ug/kg	
91-20-3	Naphthalene	ND	250	ug/kg	
103-65-1	n-Propylbenzene	ND	250	ug/kg	
100-42-5	Styrene	ND	250	ug/kg	
994-05-8	tert-Amyl Methyl Ether	ND	250	ug/kg	
637-92-3	tert-Butyl Ethyl Ether	ND	100	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	250	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	100	ug/kg	
127-18-4	Tetrachloroethene	ND	100	ug/kg	
109-99-9	Tetrahydrofuran	ND	500	ug/kg	
108-88-3	Toluene	ND	250	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	250	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	250	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	100	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	100	ug/kg	
79-01-6	Trichloroethene	ND	100	ug/kg	
75-69-4	Trichlorofluoromethane	ND	100	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	250	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	250	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	250	ug/kg	
75-01-4	Vinyl chloride	ND	100	ug/kg	
	m,p-Xylene	ND	100	ug/kg	
95-47-6	o-Xylene	ND	100	ug/kg	
1330-20-7	Xylene (total)	ND	100	ug/kg	

Method Blank Summary

Job Number: M96289
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSR666-MB	R18672A.D	1	12/09/10	GK	n/a	n/a	MSR666

The QC reported here applies to the following samples: Method: SW846 8260B

M96289-1, M96289-2, M96289-3, M96289-4

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	104% 70-130%
2037-26-5	Toluene-D8	107% 70-130%
460-00-4	4-Bromofluorobenzene	105% 70-130%

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 3

Job Number: M96289

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSR666-BS	R18669A.D	1	12/09/10	GK	n/a	n/a	MSR666
MSR666-BSD	R18670A.D	1	12/09/10	GK	n/a	n/a	MSR666

The QC reported here applies to the following samples:

Method: SW846 8260B

M96289-1, M96289-2, M96289-3, M96289-4

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	2500	2860	114	2810	112	2	70-130/25
71-43-2	Benzene	2500	2770	111	2660	106	4	70-130/25
108-86-1	Bromobenzene	2500	2970	119	2880	115	3	70-130/25
74-97-5	Bromochloromethane	2500	2840	114	2860	114	1	70-130/25
75-27-4	Bromodichloromethane	2500	2860	114	2810	112	2	70-130/25
75-25-2	Bromoform	2500	2860	114	2830	113	1	70-130/25
74-83-9	Bromomethane	2500	2480	99	2430	97	2	70-130/25
78-93-3	2-Butanone (MEK)	2500	2930	117	2800	112	5	70-130/25
104-51-8	n-Butylbenzene	2500	2840	114	2700	108	5	70-130/25
135-98-8	sec-Butylbenzene	2500	2950	118	2810	112	5	70-130/25
98-06-6	tert-Butylbenzene	2500	2920	117	2820	113	3	70-130/25
75-15-0	Carbon disulfide	2500	2860	114	2740	110	4	70-130/25
56-23-5	Carbon tetrachloride	2500	3010	120	2870	115	5	70-130/25
108-90-7	Chlorobenzene	2500	3080	123	2980	119	3	70-130/25
75-00-3	Chloroethane	2500	2480	99	2390	96	4	70-130/25
67-66-3	Chloroform	2500	2700	108	2610	104	3	70-130/25
74-87-3	Chloromethane	2500	2140	86	2110	84	1	70-130/25
95-49-8	o-Chlorotoluene	2500	2820	113	2720	109	4	70-130/25
106-43-4	p-Chlorotoluene	2500	2840	114	2760	110	3	70-130/25
108-20-3	Di-Isopropyl ether	2500	2360	94	2320	93	2	70-130/25
96-12-8	1,2-Dibromo-3-chloropropane	2500	2680	107	2700	108	1	70-130/25
124-48-1	Dibromochloromethane	2500	3200	128	3160	126	1	70-130/25
106-93-4	1,2-Dibromoethane	2500	3020	121	2940	118	3	70-130/25
95-50-1	1,2-Dichlorobenzene	2500	2930	117	2860	114	2	70-130/25
541-73-1	1,3-Dichlorobenzene	2500	2950	118	2860	114	3	70-130/25
106-46-7	1,4-Dichlorobenzene	2500	2900	116	2830	113	2	70-130/25
75-71-8	Dichlorodifluoromethane	2500	2550	102	2380	95	7	70-130/25
75-34-3	1,1-Dichloroethane	2500	2610	104	2560	102	2	70-130/25
107-06-2	1,2-Dichloroethane	2500	2750	110	2710	108	1	70-130/25
75-35-4	1,1-Dichloroethene	2500	2840	114	2750	110	3	70-130/25
156-59-2	cis-1,2-Dichloroethene	2500	2640	106	2570	103	3	70-130/25
156-60-5	trans-1,2-Dichloroethene	2500	2770	111	2710	108	2	70-130/25
78-87-5	1,2-Dichloropropane	2500	2630	105	2550	102	3	70-130/25
142-28-9	1,3-Dichloropropane	2500	2840	114	2790	112	2	70-130/25
594-20-7	2,2-Dichloropropane	2500	2840	114	2730	109	4	70-130/25
563-58-6	1,1-Dichloropropene	2500	2870	115	2790	112	3	70-130/25

Blank Spike/Blank Spike Duplicate Summary

Page 2 of 3

Job Number: M96289

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSR666-BS	R18669A.D	1	12/09/10	GK	n/a	n/a	MSR666
MSR666-BSD	R18670A.D	1	12/09/10	GK	n/a	n/a	MSR666

The QC reported here applies to the following samples:

Method: SW846 8260B

M96289-1, M96289-2, M96289-3, M96289-4

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
10061-01-5	cis-1,3-Dichloropropene	2500	2910	116	2880	115	1	70-130/25
10061-02-6	trans-1,3-Dichloropropene	2500	3180	127	3100	124	3	70-130/25
123-91-1	1,4-Dioxane	12500	13300	106	13100	105	2	70-130/25
60-29-7	Ethyl Ether	2500	2610	104	2560	102	2	70-130/25
100-41-4	Ethylbenzene	2500	2970	119	2860	114	4	70-130/25
87-68-3	Hexachlorobutadiene	2500	3160	126	3030	121	4	70-130/25
591-78-6	2-Hexanone	2500	2420	97	2460	98	2	70-130/25
98-82-8	Isopropylbenzene	2500	3390	136* a	3260	130	4	70-130/25
99-87-6	p-Isopropyltoluene	2500	2960	118	2840	114	4	70-130/25
1634-04-4	Methyl Tert Butyl Ether	2500	2590	104	2560	102	1	70-130/25
108-10-1	4-Methyl-2-pentanone (MIBK)	2500	2250	90	2260	90	0	70-130/25
74-95-3	Methylene bromide	2500	2840	114	2780	111	2	70-130/25
75-09-2	Methylene chloride	2500	2700	108	2670	107	1	70-130/25
91-20-3	Naphthalene	2500	2790	112	2760	110	1	70-130/25
103-65-1	n-Propylbenzene	2500	2860	114	2760	110	4	70-130/25
100-42-5	Styrene	2500	3180	127	3090	124	3	70-130/25
994-05-8	tert-Amyl Methyl Ether	2500	2690	108	2630	105	2	70-130/25
637-92-3	tert-Butyl Ethyl Ether	2500	2570	103	2540	102	1	70-130/25
630-20-6	1,1,1,2-Tetrachloroethane	2500	3130	125	3050	122	3	70-130/25
79-34-5	1,1,2,2-Tetrachloroethane	2500	2740	110	2680	107	2	70-130/25
127-18-4	Tetrachloroethene	2500	3270	131* a	3130	125	4	70-130/25
109-99-9	Tetrahydrofuran	2500	2220	89	2270	91	2	70-130/25
108-88-3	Toluene	2500	2830	113	2740	110	3	70-130/25
87-61-6	1,2,3-Trichlorobenzene	2500	2860	114	2810	112	2	70-130/25
120-82-1	1,2,4-Trichlorobenzene	2500	3020	121	2950	118	2	70-130/25
71-55-6	1,1,1-Trichloroethane	2500	2880	115	2770	111	4	70-130/25
79-00-5	1,1,2-Trichloroethane	2500	2720	109	2650	106	3	70-130/25
79-01-6	Trichloroethene	2500	2830	113	2710	108	4	70-130/25
75-69-4	Trichlorofluoromethane	2500	2840	114	2710	108	5	70-130/25
96-18-4	1,2,3-Trichloropropane	2500	2740	110	2710	108	1	70-130/25
95-63-6	1,2,4-Trimethylbenzene	2500	2930	117	2830	113	3	70-130/25
108-67-8	1,3,5-Trimethylbenzene	2500	2950	118	2840	114	4	70-130/25
75-01-4	Vinyl chloride	2500	2460	98	2210	88	11	70-130/25
	m,p-Xylene	5000	6060	121	5850	117	4	70-130/25
95-47-6	o-Xylene	2500	3010	120	2900	116	4	70-130/25
1330-20-7	Xylene (total)	7500	9070	121	8760	117	3	70-130/25

Blank Spike/Blank Spike Duplicate Summary

Page 3 of 3

Job Number: M96289

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSR666-BS	R18669A.D	1	12/09/10	GK	n/a	n/a	MSR666
MSR666-BSD	R18670A.D	1	12/09/10	GK	n/a	n/a	MSR666

The QC reported here applies to the following samples:

Method: SW846 8260B

M96289-1, M96289-2, M96289-3, M96289-4

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	108%	106%	70-130%
2037-26-5	Toluene-D8	111%	107%	70-130%
460-00-4	4-Bromofluorobenzene	111%	108%	70-130%

(a) Outside control limits. Blank Spike meets program technical requirements.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: M96289
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M96257-6MS	R18688.D	1	12/09/10	GK	n/a	n/a	MSR666
M96257-6MSD	R18689.D	1	12/09/10	GK	n/a	n/a	MSR666
M96257-6	R18682.D	1	12/09/10	GK	n/a	n/a	MSR666

The QC reported here applies to the following samples:

Method: SW846 8260B

M96289-1, M96289-2, M96289-3, M96289-4

CAS No.	Compound	M96257-6 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND	3590	2920	81	2920	81	0	70-130/30
71-43-2	Benzene	35.1	3590	4020	111	3940	109	2	70-130/30
108-86-1	Bromobenzene	ND	3590	4300	120	4340	121	1	70-130/30
74-97-5	Bromochloromethane	ND	3590	4070	113	4090	114	0	70-130/30
75-27-4	Bromodichloromethane	ND	3590	4120	115	4080	114	1	70-130/30
75-25-2	Bromoform	ND	3590	4230	118	4190	117	1	70-130/30
74-83-9	Bromomethane	ND	3590	3670	102	3590	100	2	70-130/30
78-93-3	2-Butanone (MEK)	ND	3590	3230	90	3170	88	2	70-130/30
104-51-8	n-Butylbenzene	ND	3590	4060	113	3990	111	2	70-130/30
135-98-8	sec-Butylbenzene	ND	3590	4190	117	4140	115	1	70-130/30
98-06-6	tert-Butylbenzene	ND	3590	4190	117	4180	116	0	70-130/30
75-15-0	Carbon disulfide	23.6	3590	4050	112	3950	109	3	70-130/30
56-23-5	Carbon tetrachloride	ND	3590	4380	122	4200	117	4	70-130/30
108-90-7	Chlorobenzene	ND	3590	4500	125	4400	122	2	70-130/30
75-00-3	Chloroethane	ND	3590	3530	98	3490	97	1	70-130/30
67-66-3	Chloroform	ND	3590	3810	106	3760	105	1	70-130/30
74-87-3	Chloromethane	ND	3590	2990	83	2920	81	2	70-130/30
95-49-8	o-Chlorotoluene	ND	3590	4060	113	4010	112	1	70-130/30
106-43-4	p-Chlorotoluene	ND	3590	4090	114	4080	114	0	70-130/30
108-20-3	Di-Isopropyl ether	ND	3590	3300	92	3320	92	1	70-130/30
96-12-8	1,2-Dibromo-3-chloropropane	ND	3590	3790	105	4010	112	6	70-130/30
124-48-1	Dibromochloromethane	ND	3590	4710	131* a	4740	132* a	1	70-130/30
106-93-4	1,2-Dibromoethane	ND	3590	4400	122	4400	122	0	70-130/30
95-50-1	1,2-Dichlorobenzene	ND	3590	4230	118	4260	119	1	70-130/30
541-73-1	1,3-Dichlorobenzene	ND	3590	4220	117	4250	118	1	70-130/30
106-46-7	1,4-Dichlorobenzene	ND	3590	4160	116	4170	116	0	70-130/30
75-71-8	Dichlorodifluoromethane	ND	3590	3480	97	3370	94	3	70-130/30
75-34-3	1,1-Dichloroethane	ND	3590	3730	104	3660	102	2	70-130/30
107-06-2	1,2-Dichloroethane	ND	3590	3890	108	3900	109	0	70-130/30
75-35-4	1,1-Dichloroethene	ND	3590	4090	114	3950	110	3	70-130/30
156-59-2	cis-1,2-Dichloroethene	ND	3590	3800	106	3760	105	1	70-130/30
156-60-5	trans-1,2-Dichloroethene	ND	3590	3930	109	3910	109	1	70-130/30
78-87-5	1,2-Dichloropropane	ND	3590	3860	107	3790	105	2	70-130/30
142-28-9	1,3-Dichloropropane	ND	3590	4060	113	4110	114	1	70-130/30
594-20-7	2,2-Dichloropropane	ND	3590	3750	104	3600	100	4	70-130/30
563-58-6	1,1-Dichloropropene	ND	3590	4230	118	4030	112	5	70-130/30

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 3

Job Number: M96289
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M96257-6MS	R18688.D	1	12/09/10	GK	n/a	n/a	MSR666
M96257-6MSD	R18689.D	1	12/09/10	GK	n/a	n/a	MSR666
M96257-6	R18682.D	1	12/09/10	GK	n/a	n/a	MSR666

The QC reported here applies to the following samples:

Method: SW846 8260B

M96289-1, M96289-2, M96289-3, M96289-4

CAS No.	Compound	M96257-6 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
10061-01-5	cis-1,3-Dichloropropene	ND		3590	4180	116	4090	114	2	70-130/30
10061-02-6	trans-1,3-Dichloropropene	ND		3590	4500	125	4480	125	0	70-130/30
123-91-1	1,4-Dioxane	ND		18000	20200	112	18000	100	12	70-130/30
60-29-7	Ethyl Ether	ND		3590	3580	100	3580	100	0	70-130/30
100-41-4	Ethylbenzene	21.8		3590	4350	120	4250	118	2	70-130/30
87-68-3	Hexachlorobutadiene	ND		3590	4700	131* a	4730	132* a	1	70-130/30
591-78-6	2-Hexanone	ND		3590	2480	69* a	2470	69* a	0	70-130/30
98-82-8	Isopropylbenzene	ND		3590	4930	137* a	4900	136* a	1	70-130/30
99-87-6	p-Isopropyltoluene	35.8		3590	4260	118	4230	117	1	70-130/30
1634-04-4	Methyl Tert Butyl Ether	ND		3590	3670	102	3700	103	1	70-130/30
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		3590	3220	90	3110	87	3	70-130/30
74-95-3	Methylene bromide	ND		3590	4060	113	4060	113	0	70-130/30
75-09-2	Methylene chloride	ND		3590	3860	107	3830	107	1	70-130/30
91-20-3	Naphthalene	2570		3590	7530	138* a	6900	120	9	70-130/30
103-65-1	n-Propylbenzene	ND		3590	4120	115	4060	113	1	70-130/30
100-42-5	Styrene	ND		3590	4710	131* a	4620	129	2	70-130/30
994-05-8	tert-Amyl Methyl Ether	ND		3590	3860	107	3880	108	1	70-130/30
637-92-3	tert-Butyl Ethyl Ether	ND		3590	3660	102	3640	101	1	70-130/30
630-20-6	1,1,1,2-Tetrachloroethane	ND		3590	4620	129	4480	125	3	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	ND		3590	3750	104	3780	105	1	70-130/30
127-18-4	Tetrachloroethene	ND		3590	4830	134* a	4640	129	4	70-130/30
109-99-9	Tetrahydrofuran	ND		3590	3210	89	3200	89	0	70-130/30
108-88-3	Toluene	47.1		3590	4140	114	4060	112	2	70-130/30
87-61-6	1,2,3-Trichlorobenzene	ND		3590	4000	111	4030	112	1	70-130/30
120-82-1	1,2,4-Trichlorobenzene	ND		3590	4240	118	4320	120	2	70-130/30
71-55-6	1,1,1-Trichloroethane	ND		3590	4090	114	4020	112	2	70-130/30
79-00-5	1,1,2-Trichloroethane	ND		3590	3950	110	3910	109	1	70-130/30
79-01-6	Trichloroethene	ND		3590	4260	119	4260	119	0	70-130/30
75-69-4	Trichlorofluoromethane	ND		3590	4030	112	3880	108	4	70-130/30
96-18-4	1,2,3-Trichloropropane	ND		3590	3850	107	3910	109	2	70-130/30
95-63-6	1,2,4-Trimethylbenzene	34.7		3590	4260	118	4220	116	1	70-130/30
108-67-8	1,3,5-Trimethylbenzene	26.5		3590	4270	118	4240	117	1	70-130/30
75-01-4	Vinyl chloride	ND		3590	3890	108	3880	108	0	70-130/30
	m,p-Xylene	67.2		7190	8870	122	8660	120	2	70-130/30
95-47-6	o-Xylene	23.6		3590	4440	123	4310	119	3	70-130/30
1330-20-7	Xylene (total)	90.8		10800	13300	123	13000	120	2	70-130/30

Matrix Spike/Matrix Spike Duplicate Summary

Page 3 of 3

Job Number: M96289

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M96257-6MS	R18688.D	1	12/09/10	GK	n/a	n/a	MSR666
M96257-6MSD	R18689.D	1	12/09/10	GK	n/a	n/a	MSR666
M96257-6	R18682.D	1	12/09/10	GK	n/a	n/a	MSR666

The QC reported here applies to the following samples:

Method: SW846 8260B

M96289-1, M96289-2, M96289-3, M96289-4

CAS No.	Surrogate Recoveries	MS	MSD	M96257-6	Limits
1868-53-7	Dibromofluoromethane	109%	106%	107%	70-130%
2037-26-5	Toluene-D8	113%	111%	111%	70-130%
460-00-4	4-Bromofluorobenzene	112%	112%	113%	70-130%

(a) Outside control limits due to possible matrix interference. Refer to Blank Spike.

Volatile Internal Standard Area Summary

Page 1 of 1

Job Number: M96289
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Check Std: MSR665-CC637
Lab File ID: R18668.D
Instrument ID: GCMSR
Injection Date: 12/09/10
Injection Time: 11:44
Method: SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	311163	9.11	429211	9.98	204434	13.25	260910	15.81	79157	6.69
Upper Limit ^a	622326	9.61	858422	10.48	408868	13.75	521820	16.31	158314	7.19
Lower Limit ^b	155582	8.61	214606	9.48	102217	12.75	130455	15.31	39579	6.19

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSR666-BS	315184	9.11	431067	9.98	205285	13.25	258619	15.81	79429	6.69
MSR665-BS	315184	9.11	431067	9.98	205285	13.25	258619	15.81	79429	6.69
MSR666-BSD	319323	9.11	441479	9.99	209655	13.25	263268	15.81	82194	6.69
MSR665-BSD	319323	9.11	441479	9.99	209655	13.25	263268	15.81	82194	6.69
MSR666-MB	307128	9.11	413264	9.99	185930	13.25	247941	15.81	78601	6.69
MSR665-MB	307128	9.11	413264	9.99	185930	13.25	247941	15.81	78601	6.69
ZZZZZZ	299938	9.11	405104	9.99	183268	13.25	249802	15.81	73855	6.69
ZZZZZZ	293863	9.11	399680	9.99	183439	13.25	238853	15.81	76082	6.68
ZZZZZZ	303627	9.11	406971	9.98	184327	13.25	238597	15.81	75530	6.71
ZZZZZZ	290099	9.11	389305	9.99	178006	13.25	237344	15.81	75194	6.69
ZZZZZZ	297028	9.11	398516	9.99	187487	13.25	249683	15.81	72311	6.69
M96289-3	301704	9.11	405483	9.98	188417	13.25	246534	15.81	72904	6.68
M96289-2	309940	9.11	417236	9.99	196701	13.25	257739	15.81	74090	6.69
ZZZZZZ	316033	9.11	427239	9.99	198244	13.25	260755	15.81	72868	6.68
M96257-6	318260	9.11	430043	9.99	197346	13.25	260403	15.81	80595	6.69
ZZZZZZ	310642	9.12	420167	9.99	192625	13.25	259135	15.81	75360	6.68
ZZZZZZ	304881	9.12	415218	9.99	190791	13.25	258708	15.81	75043	6.68
M96317-5	309127	9.12	416148	9.99	188424	13.25	258001	15.81	74300	6.68
M96317-5MS	316116	9.11	431809	9.99	204450	13.25	263631	15.81	76750	6.68
M96317-5MSD	311208	9.11	426019	9.98	204778	13.25	265133	15.81	78923	6.67
M96257-6MS	325926	9.11	440035	9.98	207574	13.24	265105	15.81	84862	6.69
M96257-6MSD	323236	9.11	439036	9.99	208017	13.25	260498	15.81	82257	6.69
M96289-4	312582	9.11	420400	9.99	192613	13.25	254339	15.81	74927	6.69
M96289-1	309797	9.11	418159	9.99	194534	13.25	255252	15.81	77765	6.69
ZZZZZZ	41180 ^c	9.12	40799 ^c	10.00	22587 ^c	13.27	13505 ^c	15.82	918 ^c	6.67

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Outside control limits due to possible matrix interference. Confirmed by reanalysis.

Volatile Internal Standard Area Summary

Page 1 of 1

Job Number: M96289
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Check Std: MSR666-CC638
Lab File ID: R18668A.D
Instrument ID: GCMSR
Injection Date: 12/09/10
Injection Time: 11:44
Method: SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	311163	9.11	429211	9.98	204434	13.25	260910	15.81	79157	6.69
Upper Limit ^a	622326	9.61	858422	10.48	408868	13.75	521820	16.31	158314	7.19
Lower Limit ^b	155582	8.61	214606	9.48	102217	12.75	130455	15.31	39579	6.19

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSR666-BS	315184	9.11	431067	9.98	205285	13.25	258619	15.81	79429	6.69
MSR665-BS	315184	9.11	431067	9.98	205285	13.25	258619	15.81	79429	6.69
MSR666-BSD	319323	9.11	441479	9.99	209655	13.25	263268	15.81	82194	6.69
MSR665-BSD	319323	9.11	441479	9.99	209655	13.25	263268	15.81	82194	6.69
MSR666-MB	307128	9.11	413264	9.99	185930	13.25	247941	15.81	78601	6.69
MSR665-MB	307128	9.11	413264	9.99	185930	13.25	247941	15.81	78601	6.69
ZZZZZZ	299938	9.11	405104	9.99	183268	13.25	249802	15.81	73855	6.69
ZZZZZZ	293863	9.11	399680	9.99	183439	13.25	238853	15.81	76082	6.68
ZZZZZZ	303627	9.11	406971	9.98	184327	13.25	238597	15.81	75530	6.71
ZZZZZZ	290099	9.11	389305	9.99	178006	13.25	237344	15.81	75194	6.69
ZZZZZZ	297028	9.11	398516	9.99	187487	13.25	249683	15.81	72311	6.69
M96289-3	301704	9.11	405483	9.98	188417	13.25	246534	15.81	72904	6.68
M96289-2	309940	9.11	417236	9.99	196701	13.25	257739	15.81	74090	6.69
ZZZZZZ	316033	9.11	427239	9.99	198244	13.25	260755	15.81	72868	6.68
M96257-6	318260	9.11	430043	9.99	197346	13.25	260403	15.81	80595	6.69
ZZZZZZ	310642	9.12	420167	9.99	192625	13.25	259135	15.81	75360	6.68
ZZZZZZ	304881	9.12	415218	9.99	190791	13.25	258708	15.81	75043	6.68
M96317-5	309127	9.12	416148	9.99	188424	13.25	258001	15.81	74300	6.68
M96317-5MS	316116	9.11	431809	9.99	204450	13.25	263631	15.81	76750	6.68
M96317-5MSD	311208	9.11	426019	9.98	204778	13.25	265133	15.81	78923	6.67
M96257-6MS	325926	9.11	440035	9.98	207574	13.24	265105	15.81	84862	6.69
M96257-6MSD	323236	9.11	439036	9.99	208017	13.25	260498	15.81	82257	6.69
M96289-4	312582	9.11	420400	9.99	192613	13.25	254339	15.81	74927	6.69
M96289-1	309797	9.11	418159	9.99	194534	13.25	255252	15.81	77765	6.69
ZZZZZZ	41180 ^c	9.12	40799 ^c	10.00	22587 ^c	13.27	13505 ^c	15.82	918 ^c	6.67

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Outside control limits due to possible matrix interference. Confirmed by reanalysis.

Volatile Surrogate Recovery Summary

Page 1 of 1

Job Number: M96289

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Method: SW846 8260B

Matrix: SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
M96289-1	R18692.D	109.0	114.0	115.0
M96289-2	R18679.D	105.0	108.0	109.0
M96289-3	R18678.D	110.0	115.0	115.0
M96289-4	R18691.D	106.0	114.0	114.0
M96257-6MS	R18688.D	109.0	113.0	112.0
M96257-6MSD	R18689.D	106.0	111.0	112.0
MSR666-BS	R18669A.D	108.0	111.0	111.0
MSR666-BSD	R18670A.D	106.0	107.0	108.0
MSR666-MB	R18672A.D	104.0	107.0	105.0

Surrogate Compounds	Recovery Limits
------------------------	--------------------

S1 = Dibromofluoromethane 70-130%

S2 = Toluene-D8 70-130%

S3 = 4-Bromofluorobenzene 70-130%

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Page 1 of 2

Job Number: M96289
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23538-MB	S19958.D	1	12/13/10	PR	12/06/10	OP23538	MSS826

The QC reported here applies to the following samples:

Method: SW846 8270C

M96289-1, M96289-2, M96289-3, M96289-4

CAS No.	Compound	Result	RL	Units	Q
65-85-0	Benzoic acid	ND	480	ug/kg	
95-57-8	2-Chlorophenol	ND	240	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	480	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	480	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	480	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	960	ug/kg	
95-48-7	2-Methylphenol	ND	480	ug/kg	
	3&4-Methylphenol	ND	480	ug/kg	
88-75-5	2-Nitrophenol	ND	480	ug/kg	
100-02-7	4-Nitrophenol	ND	960	ug/kg	
87-86-5	Pentachlorophenol	ND	480	ug/kg	
108-95-2	Phenol	ND	240	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	480	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	480	ug/kg	
83-32-9	Acenaphthene	ND	240	ug/kg	
208-96-8	Acenaphthylene	ND	240	ug/kg	
98-86-2	Acetophenone	ND	480	ug/kg	
62-53-3	Aniline	ND	480	ug/kg	
120-12-7	Anthracene	ND	240	ug/kg	
56-55-3	Benzo(a)anthracene	ND	240	ug/kg	
50-32-8	Benzo(a)pyrene	ND	240	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	240	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	240	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	240	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	240	ug/kg	
85-68-7	Butyl benzyl phthalate	13.7	240	ug/kg	J
91-58-7	2-Chloronaphthalene	ND	240	ug/kg	
106-47-8	4-Chloroaniline	ND	480	ug/kg	
218-01-9	Chrysene	ND	240	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	240	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	240	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	240	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	240	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	240	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	240	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	240	ug/kg	

Method Blank Summary

Page 2 of 2

Job Number: M96289
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23538-MB	S19958.D	1	12/13/10	PR	12/06/10	OP23538	MSS826

The QC reported here applies to the following samples:

Method: SW846 8270C

M96289-1, M96289-2, M96289-3, M96289-4

CAS No.	Compound	Result	RL	Units	Q
121-14-2	2,4-Dinitrotoluene	ND	480	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	480	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	240	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	240	ug/kg	
132-64-9	Dibenzofuran	ND	240	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	240	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	240	ug/kg	
84-66-2	Diethyl phthalate	ND	240	ug/kg	
131-11-3	Dimethyl phthalate	ND	240	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	101	240	ug/kg	J
206-44-0	Fluoranthene	ND	240	ug/kg	
86-73-7	Fluorene	ND	240	ug/kg	
118-74-1	Hexachlorobenzene	ND	240	ug/kg	
87-68-3	Hexachlorobutadiene	ND	240	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	480	ug/kg	
67-72-1	Hexachloroethane	ND	240	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	240	ug/kg	
78-59-1	Isophorone	ND	240	ug/kg	
91-57-6	2-Methylnaphthalene	ND	240	ug/kg	
91-20-3	Naphthalene	ND	240	ug/kg	
98-95-3	Nitrobenzene	ND	240	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	240	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	240	ug/kg	
85-01-8	Phenanthrene	ND	240	ug/kg	
129-00-0	Pyrene	ND	240	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	240	ug/kg	

CAS No.	Surrogate Recoveries	Limits
367-12-4	2-Fluorophenol	81% 30-130%
4165-62-2	Phenol-d5	78% 30-130%
118-79-6	2,4,6-Tribromophenol	93% 30-130%
4165-60-0	Nitrobenzene-d5	79% 30-130%
321-60-8	2-Fluorobiphenyl	91% 30-130%
1718-51-0	Terphenyl-d14	106% 30-130%

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 3

Job Number: M96289

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23538-BS	S19959.D	1	12/13/10	PR	12/06/10	OP23538	MSS826
OP23538-BSD	S19960.D	1	12/13/10	PR	12/06/10	OP23538	MSS826

The QC reported here applies to the following samples:

Method: SW846 8270C

M96289-1, M96289-2, M96289-3, M96289-4

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic acid	4870	3100	64	3140	64	1	30-130/30
95-57-8	2-Chlorophenol	4870	3700	76	3600	73	3	30-130/30
59-50-7	4-Chloro-3-methyl phenol	4870	3860	79	3880	79	1	30-130/30
120-83-2	2,4-Dichlorophenol	4870	4170	86	4200	86	1	30-130/30
105-67-9	2,4-Dimethylphenol	4870	3580	73	3560	73	1	30-130/30
51-28-5	2,4-Dinitrophenol	4870	3370	69	2990	61	12	30-130/30
95-48-7	2-Methylphenol	4870	3570	73	3520	72	1	30-130/30
	3&4-Methylphenol	9750	9550	98	9340	95	2	30-130/30
88-75-5	2-Nitrophenol	4870	4010	82	4050	82	1	30-130/30
100-02-7	4-Nitrophenol	4870	3370	69	3370	69	0	30-130/30
87-86-5	Pentachlorophenol	4870	3270	67	3160	64	3	30-130/30
108-95-2	Phenol	4870	3700	76	3660	75	1	30-130/30
95-95-4	2,4,5-Trichlorophenol	4870	4140	85	4230	86	2	30-130/30
88-06-2	2,4,6-Trichlorophenol	4870	4360	89	4360	89	0	30-130/30
83-32-9	Acenaphthene	2440	2020	83	2010	82	0	40-140/30
208-96-8	Acenaphthylene	2440	1500	62	1490	61	1	40-140/30
98-86-2	Acetophenone	2440	3520	144* a	3440	140	2	40-140/30
62-53-3	Aniline	2440	1380	57	1350	55	2	40-140/30
120-12-7	Anthracene	2440	2070	85	2070	84	0	40-140/30
56-55-3	Benzo(a)anthracene	2440	2210	91	2260	92	2	40-140/30
50-32-8	Benzo(a)pyrene	2440	2070	85	2050	84	1	40-140/30
205-99-2	Benzo(b)fluoranthene	2440	2050	84	2070	84	1	40-140/30
191-24-2	Benzo(g,h,i)perylene	2440	2040	84	2080	85	2	40-140/30
207-08-9	Benzo(k)fluoranthene	2440	2300	94	2240	91	3	40-140/30
101-55-3	4-Bromophenyl phenyl ether	2440	2180	89	2170	88	0	40-140/30
85-68-7	Butyl benzyl phthalate	2440	2060	85	2090	85	1	40-140/30
91-58-7	2-Chloronaphthalene	2440	2050	84	2050	84	0	40-140/30
106-47-8	4-Chloroaniline	2440	1530	63	1530	62	0	40-140/30
218-01-9	Chrysene	2440	2220	91	2210	90	0	40-140/30
111-91-1	bis(2-Chloroethoxy)methane	2440	1840	76	1860	76	1	40-140/30
111-44-4	bis(2-Chloroethyl)ether	2440	1780	73	1680	68	6	40-140/30
108-60-1	bis(2-Chloroisopropyl)ether	2440	1690	69	1630	66	4	40-140/30
95-50-1	1,2-Dichlorobenzene	2440	1820	75	1760	72	3	40-140/30
122-66-7	1,2-Diphenylhydrazine	2440	1830	75	1820	74	1	40-140/30
541-73-1	1,3-Dichlorobenzene	2440	1790	73	1750	71	2	40-140/30
106-46-7	1,4-Dichlorobenzene	2440	1760	72	1730	70	2	40-140/30

Blank Spike/Blank Spike Duplicate Summary

Page 2 of 3

Job Number: M96289
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23538-BS	S19959.D	1	12/13/10	PR	12/06/10	OP23538	MSS826
OP23538-BSD	S19960.D	1	12/13/10	PR	12/06/10	OP23538	MSS826

The QC reported here applies to the following samples:

Method: SW846 8270C

M96289-1, M96289-2, M96289-3, M96289-4

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
121-14-2	2,4-Dinitrotoluene	2440	2090	86	2080	85	0	40-140/30
606-20-2	2,6-Dinitrotoluene	2440	2050	84	2030	83	1	40-140/30
91-94-1	3,3'-Dichlorobenzidine	2440	1720	71	1740	71	1	40-140/30
53-70-3	Dibenzo(a,h)anthracene	2440	2140	88	2170	88	1	40-140/30
132-64-9	Dibenzofuran	2440	1950	80	1910	78	2	40-140/30
84-74-2	Di-n-butyl phthalate	2440	2030	83	2020	82	0	40-140/30
117-84-0	Di-n-octyl phthalate	2440	2310	95	2300	94	0	40-140/30
84-66-2	Diethyl phthalate	2440	2070	85	2030	83	2	40-140/30
131-11-3	Dimethyl phthalate	2440	2070	85	2060	84	0	40-140/30
117-81-7	bis(2-Ethylhexyl)phthalate	2440	2120	87	2110	86	0	40-140/30
206-44-0	Fluoranthene	2440	2050	84	2030	83	1	40-140/30
86-73-7	Fluorene	2440	2120	87	2090	85	1	40-140/30
118-74-1	Hexachlorobenzene	2440	2170	89	2150	88	1	40-140/30
87-68-3	Hexachlorobutadiene	2440	1940	80	1950	79	1	40-140/30
77-47-4	Hexachlorocyclopentadiene	2440	1190	49	1190	48	0	40-140/30
67-72-1	Hexachloroethane	2440	1690	69	1670	68	1	40-140/30
193-39-5	Indeno(1,2,3-cd)pyrene	2440	2190	90	2220	90	1	40-140/30
78-59-1	Isophorone	2440	1770	73	1770	72	0	40-140/30
91-57-6	2-Methylnaphthalene	2440	1900	78	1900	77	0	40-140/30
91-20-3	Naphthalene	2440	1920	79	1940	79	1	40-140/30
98-95-3	Nitrobenzene	2440	1740	71	1750	71	1	40-140/30
621-64-7	N-Nitroso-di-n-propylamine	2440	1830	75	1780	73	3	40-140/30
86-30-6	N-Nitrosodiphenylamine	2440	2130	87	2140	87	0	40-140/30
85-01-8	Phenanthrene	2440	1970	81	1950	79	1	40-140/30
129-00-0	Pyrene	2440	2170	89	2220	90	2	40-140/30
120-82-1	1,2,4-Trichlorobenzene	2440	1970	81	1960	80	1	40-140/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	74%	71%	30-130%
4165-62-2	Phenol-d5	73%	69%	30-130%
118-79-6	2,4,6-Tribromophenol	90%	88%	30-130%
4165-60-0	Nitrobenzene-d5	72%	72%	30-130%
321-60-8	2-Fluorobiphenyl	85%	85%	30-130%
1718-51-0	Terphenyl-d14	92%	90%	30-130%

Blank Spike/Blank Spike Duplicate Summary

Page 3 of 3

Job Number: M96289

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23538-BS	S19959.D	1	12/13/10	PR	12/06/10	OP23538	MSS826
OP23538-BSD	S19960.D	1	12/13/10	PR	12/06/10	OP23538	MSS826

The QC reported here applies to the following samples:

Method: SW846 8270C

M96289-1, M96289-2, M96289-3, M96289-4

(a) Outside control limits. Associated samples are non-detect for this compound.

6.2.1

6

Matrix Spike Summary

Page 1 of 3

Job Number: M96289
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23538-MS	S19961.D	1	12/13/10	PR	12/06/10	OP23538	MSS826
M96289-4	S19975.D	1	12/13/10	PR	12/06/10	OP23538	MSS826

The QC reported here applies to the following samples:

Method: SW846 8270C

M96289-1, M96289-2, M96289-3, M96289-4

CAS No.	Compound	M96289-4 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Limits
65-85-0	Benzoic acid	ND		5430	655	12* a	30-130
95-57-8	2-Chlorophenol	ND		5430	3510	65	30-130
59-50-7	4-Chloro-3-methyl phenol	ND		5430	3800	70	30-130
120-83-2	2,4-Dichlorophenol	ND		5430	3620	67	30-130
105-67-9	2,4-Dimethylphenol	ND		5430	3670	68	30-130
51-28-5	2,4-Dinitrophenol	ND		5430	ND	0* a	30-130
95-48-7	2-Methylphenol	52.1		5430	3670	67	30-130
	3&4-Methylphenol	262		10900	9910	89	30-130
88-75-5	2-Nitrophenol	ND		5430	3530	65	30-130
100-02-7	4-Nitrophenol	ND		5430	2460	45	30-130
87-86-5	Pentachlorophenol	ND		5430	978	18* a	30-130
108-95-2	Phenol	ND		5430	3690	68	30-130
95-95-4	2,4,5-Trichlorophenol	ND		5430	3230	59	30-130
88-06-2	2,4,6-Trichlorophenol	ND		5430	3410	63	30-130
83-32-9	Acenaphthene	537		2720	2980	90	40-140
208-96-8	Acenaphthylene	740		2720	2060	49	40-140
98-86-2	Acetophenone	25.3		2720	3730	136	40-140
62-53-3	Aniline	ND		2720	1090	40	40-140
120-12-7	Anthracene	2550		2720	5610	113	40-140
56-55-3	Benzo(a)anthracene	7540		2720	9820	84	40-140
50-32-8	Benzo(a)pyrene	5800		2720	7220	52	40-140
205-99-2	Benzo(b)fluoranthene	4340		2720	6150	67	40-140
191-24-2	Benzo(g,h,i)perylene	2700		2720	6040	123	40-140
207-08-9	Benzo(k)fluoranthene	4240		2720	5610	50	40-140
101-55-3	4-Bromophenyl phenyl ether	ND		2720	2160	80	40-140
85-68-7	Butyl benzyl phthalate	ND		2720	2220	82	40-140
91-58-7	2-Chloronaphthalene	ND		2720	2000	74	40-140
106-47-8	4-Chloroaniline	ND		2720	1550	57	40-140
218-01-9	Chrysene	6590		2720	8960	87	40-140
111-91-1	bis(2-Chloroethoxy)methane	ND		2720	1810	67	40-140
111-44-4	bis(2-Chloroethyl)ether	ND		2720	1880	69	40-140
108-60-1	bis(2-Chloroisopropyl)ether	ND		2720	1770	65	40-140
95-50-1	1,2-Dichlorobenzene	ND		2720	1850	68	40-140
122-66-7	1,2-Diphenylhydrazine	ND		2720	1810	67	40-140
541-73-1	1,3-Dichlorobenzene	ND		2720	1810	67	40-140
106-46-7	1,4-Dichlorobenzene	ND		2720	1780	66	40-140

Matrix Spike Summary

Page 2 of 3

Job Number: M96289
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23538-MS	S19961.D	1	12/13/10	PR	12/06/10	OP23538	MSS826
M96289-4	S19975.D	1	12/13/10	PR	12/06/10	OP23538	MSS826

The QC reported here applies to the following samples:

Method: SW846 8270C

M96289-1, M96289-2, M96289-3, M96289-4

CAS No.	Compound	M96289-4 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Limits
121-14-2	2,4-Dinitrotoluene	ND		2720	1920	71	40-140
606-20-2	2,6-Dinitrotoluene	ND		2720	1970	73	40-140
91-94-1	3,3'-Dichlorobenzidine	ND		2720	1740	64	40-140
53-70-3	Dibenzo(a,h)anthracene	1450		2720	4060	96	40-140
132-64-9	Dibenzofuran	571		2720	2850	84	40-140
84-74-2	Di-n-butyl phthalate	ND		2720	2060	76	40-140
117-84-0	Di-n-octyl phthalate	ND		2720	1950	72	40-140
84-66-2	Diethyl phthalate	ND		2720	2010	74	40-140
131-11-3	Dimethyl phthalate	ND		2720	1960	72	40-140
117-81-7	bis(2-Ethylhexyl)phthalate	76.7		2720	2340	83	40-140
206-44-0	Fluoranthene	10700		2720	13800	114	40-140
86-73-7	Fluorene	902		2720	3490	95	40-140
118-74-1	Hexachlorobenzene	ND		2720	2120	78	40-140
87-68-3	Hexachlorobutadiene	ND		2720	1990	73	40-140
77-47-4	Hexachlorocyclopentadiene	ND		2720	614	23* a	40-140
67-72-1	Hexachloroethane	ND		2720	1780	66	40-140
193-39-5	Indeno(1,2,3-cd)pyrene	2900		2720	5920	111	40-140
78-59-1	Isophorone	ND		2720	1750	64	40-140
91-57-6	2-Methylnaphthalene	299		2720	2380	77	40-140
91-20-3	Naphthalene	662		2720	2730	76	40-140
98-95-3	Nitrobenzene	ND		2720	1720	63	40-140
621-64-7	N-Nitroso-di-n-propylamine	ND		2720	1950	72	40-140
86-30-6	N-Nitrosodiphenylamine	ND		2720	2250	83	40-140
85-01-8	Phenanthrene	6180		2720	11600	200* b	40-140
129-00-0	Pyrene	9050		2720	13200	153* b	40-140
120-82-1	1,2,4-Trichlorobenzene	ND		2720	1960	72	40-140

CAS No.	Surrogate Recoveries	MS	M96289-4	Limits
367-12-4	2-Fluorophenol	60%	59%	30-130%
4165-62-2	Phenol-d5	62%	61%	30-130%
118-79-6	2,4,6-Tribromophenol	67%	66%	30-130%
4165-60-0	Nitrobenzene-d5	64%	63%	30-130%
321-60-8	2-Fluorobiphenyl	74%	73%	30-130%
1718-51-0	Terphenyl-d14	84%	72%	30-130%

Matrix Spike Summary

Page 3 of 3

Job Number: M96289
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23538-MS	S19961.D	1	12/13/10	PR	12/06/10	OP23538	MSS826
M96289-4	S19975.D	1	12/13/10	PR	12/06/10	OP23538	MSS826

The QC reported here applies to the following samples:

Method: SW846 8270C

M96289-1, M96289-2, M96289-3, M96289-4

- (a) Outside control limits due to possible matrix interference. Refer to Blank Spike.
- (b) Outside control limits due to high level in sample relative to spike amount.

6.3.1

6

Semivolatile Internal Standard Area Summary

Page 1 of 1

Job Number: M96289
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Check Std: MSS826-CC822	Injection Date: 12/13/10
Lab File ID: S19952.D	Injection Time: 11:46
Instrument ID: GCMSS	Method: SW846 8270C

	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Check Std	218593	6.03	856118	7.40	415984	9.63	642010	11.84	611386	16.21	576931	18.44
Upper Limit ^a	437186	6.53	1712236	7.90	831968	10.13	1284020	12.34	1222772	16.71	1153862	18.94
Lower Limit ^b	109297	5.53	428059	6.90	207992	9.13	321005	11.34	305693	15.71	288466	17.94

Lab Sample ID	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
M95727-18R	253155	6.03	1033434	7.40	509342	9.63	779482	11.84	676573	16.20	632061	18.44
OP23575-LB	268236	6.03	1092315	7.40	527191	9.63	807422	11.84	700043	16.20	651661	18.44
OP23539-MS	228486	6.03	950874	7.40	455468	9.63	686679	11.84	599528	16.20	592392	18.44
OP23539-MSD	223064	6.03	943654	7.40	449794	9.63	697178	11.84	602191	16.20	588296	18.44
OP23538-MB	296654	6.03	1207985	7.40	589630	9.63	863756	11.84	706856	16.20	607635	18.44
OP23538-BS	290714	6.04	1143012	7.40	546797	9.63	835725	11.85	714481	16.20	613248	18.44
OP23538-BSD	266967	6.04	1020014	7.40	487989	9.63	741936	11.85	629424	16.20	545823	18.44
OP23538-MS	208816	6.04	874854	7.40	443125	9.63	661758	11.85	536045	16.22	593353	18.46
ZZZZZZ	273180	6.04	1113488	7.40	531230	9.63	754381	11.85	599834	16.21	632022	18.45
ZZZZZZ	225199	6.03	946882	7.40	462675	9.63	702612	11.84	606601	16.22	691106	18.46
ZZZZZZ	299266	6.04	1234710	7.40	570721	9.63	795647	11.84	629394	16.21	702738	18.45
ZZZZZZ	297067	6.04	1247347	7.40	607422	9.63	891503	11.84	664830	16.20	702269	18.44
ZZZZZZ	270917	6.04	1113683	7.40	537969	9.63	773134	11.84	591541	16.21	696203	18.45
ZZZZZZ	272963	6.03	1136767	7.40	535584	9.63	761166	11.84	607855	16.21	706579	18.45
ZZZZZZ	267760	6.03	1087650	7.40	514509	9.63	717723	11.84	618555	16.21	760821	18.46
ZZZZZZ	277246	6.04	1100917	7.40	505804	9.63	708218	11.85	633430	16.22	815021	18.46
ZZZZZZ	241511	6.03	994088	7.40	479296	9.63	720484	11.84	714946	16.21	809292	18.45
M96289-1	217783	6.04	763338	7.41	327673	9.65	520832	11.84	512308	16.22	649713	18.46
M96289-2	300527	6.03	1107994	7.40	466622	9.63	704549	11.85	690055	16.23	936365	18.48
M96289-3	268370	6.04	1084324	7.40	521379	9.63	745548	11.85	726593	16.22	961904	18.46
M96289-4	246588	6.04	1036194	7.40	512497	9.63	773685	11.84	691352	16.22	864115	18.47
M96317-5	238584	6.03	986228	7.40	485782	9.63	753991	11.84	734680	16.21	837998	18.45

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Page 1 of 1

Job Number: M96289
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Check Std: MSS831-CC822	Injection Date: 12/15/10
Lab File ID: S20034.D	Injection Time: 18:31
Instrument ID: GCMSS	Method: SW846 8270C

	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Check Std	256258	6.00	1014689	7.37	509951	9.60	782402	11.81	722807	16.18	680980	18.42
Upper Limit ^a	512516	6.50	2029378	7.87	1019902	10.10	1564804	12.31	1445614	16.68	1361960	18.92
Lower Limit ^b	128129	5.50	507345	6.87	254976	9.10	391201	11.31	361404	15.68	340490	17.92

Lab Sample ID	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
OP23596-MB	314717	6.00	1291199	7.37	599464	9.60	809604	11.80	576623	16.17	489214	18.41
OP23596-BS	244280	6.00	923273	7.37	417224	9.60	574063	11.81	457964	16.17	398638	18.41
OP23596-MS	223607	6.00	848959	7.37	384598	9.59	534171	11.81	426646	16.17	436386	18.42
OP23596-MSD	331756	6.01	1223759	7.37	511645	9.60	633099	11.81	454759	16.17	472744	18.42
ZZZZZZ	262500	6.01	1052447	7.37	479012	9.60	648198	11.80	483798	16.17	460944	18.41
ZZZZZZ	185696	6.00	771001	7.37	370576	9.59	530882	11.80	428662	16.17	458531	18.41
ZZZZZZ	247286	6.00	981136	7.37	450476	9.59	615982	11.80	502178	16.17	556883	18.42
ZZZZZZ	248365	6.01	963400	7.37	434195	9.60	593800	11.80	494709	16.17	599825	18.42
ZZZZZZ	221919	6.00	867174	7.37	386473	9.59	543771	11.80	515044	16.17	669034	18.42
M96485-6	315366	6.01	1192067	7.37	520629	9.60	688658	11.80	555702	16.17	681174	18.42
ZZZZZZ	234000	6.01	896535	7.37	399970	9.59	537026	11.80	412082	16.17	552828	18.42
ZZZZZZ	258691	6.01	1011689	7.37	474454	9.60	684920	11.80	531341	16.17	590054	18.42
ZZZZZZ	225600	6.00	902550	7.37	416307	9.59	585294	11.80	509551	16.17	617565	18.42
ZZZZZZ	213869	6.00	850875	7.37	386703	9.59	554268	11.80	485639	16.17	600947	18.42
ZZZZZZ	209838	6.00	831619	7.36	375715	9.59	545117	11.80	471055	16.17	583334	18.42
ZZZZZZ	184631	6.00	757022	7.37	354660	9.59	526030	11.80	450670	16.17	545005	18.42
ZZZZZZ	223411	6.00	897045	7.37	410701	9.59	602774	11.80	473508	16.17	552350	18.41
ZZZZZZ	190392	6.00	761603	7.37	347996	9.59	507900	11.80	447281	16.17	567371	18.41
ZZZZZZ	209191	6.00	838918	7.36	381247	9.59	563183	11.80	478924	16.17	581757	18.41
ZZZZZZ	216984	6.00	859574	7.36	383034	9.59	546259	11.80	455429	16.17	577180	18.41
ZZZZZZ	268028	6.00	1074202	7.36	480262	9.59	668162	11.80	512498	16.17	563657	18.41
ZZZZZZ	224822	6.00	875883	7.36	397002	9.59	568775	11.80	478893	16.17	571536	18.41
OP23577-LB	231730	6.00	977905	7.36	480971	9.59	747199	11.80	647490	16.17	691446	18.41
M96289-2	236646	6.00	953818	7.36	448637	9.59	686259	11.80	615595	16.17	649586	18.42

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Surrogate Recovery Summary

Page 1 of 1

Job Number: M96289

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Method: SW846 8270C

Matrix: SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
M96289-1	S19972.D	44.0	44.0	48.0	72.0	53.0	46.0
M96289-2	S20058.D	61.0	58.0	52.0	67.0	85.0	89.0
M96289-2	S19973.D	62.0	61.0	73.0	69.0	73.0	67.0
M96289-3	S19974.D	54.0	58.0	74.0	61.0	74.0	72.0
M96289-4	S19975.D	59.0	61.0	66.0	63.0	73.0	72.0
OP23538-BS	S19959.D	74.0	73.0	90.0	72.0	85.0	92.0
OP23538-BSD	S19960.D	71.0	69.0	88.0	72.0	85.0	90.0
OP23538-MB	S19958.D	81.0	78.0	93.0	79.0	91.0	106.0
OP23538-MS	S19961.D	60.0	62.0	67.0	64.0	74.0	84.0

Surrogate Compounds

Recovery Limits

S1 = 2-Fluorophenol	30-130%
S2 = Phenol-d5	30-130%
S3 = 2,4,6-Tribromophenol	30-130%
S4 = Nitrobenzene-d5	30-130%
S5 = 2-Fluorobiphenyl	30-130%
S6 = Terphenyl-d14	30-130%

6.5.1

6

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Page 1 of 1

Job Number: M96289

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GBH929-MB	BH17817.D	1	12/07/10	WS	n/a	n/a	GBH929

The QC reported here applies to the following samples:

Method: MADEP VPH REV 1.1

M96289-1, M96289-2, M96289-3, M96289-4

CAS No.	Compound	Result	RL	Units	Q
	C5- C8 Aliphatics (Unadj.)	ND	5000	ug/kg	
	C9- C12 Aliphatics (Unadj.)	ND	5000	ug/kg	
	C9- C10 Aromatics (Unadj.)	ND	5000	ug/kg	
	C5- C8 Aliphatics	ND	5000	ug/kg	
	C9- C12 Aliphatics	ND	5000	ug/kg	

CAS No.	Surrogate Recoveries	Limits	
615-59-8	2,5-Dibromotoluene	72%	70-130%
615-59-8	2,5-Dibromotoluene	70%	70-130%

Blank Spike/Blank Spike Duplicate Summary

Job Number: M96289
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GBH929-BSP1	BH17820.D	1	12/07/10	WS	n/a	n/a	GBH929
GBH929-BSD1	BH17819.D	1	12/07/10	WS	n/a	n/a	GBH929

The QC reported here applies to the following samples: Method: MADEP VPH REV 1.1

M96289-1, M96289-2, M96289-3, M96289-4

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
	C5- C8 Aliphatics (Unadj.)	7500	5540	74	5650	75	2	70-130/25
	C9- C12 Aliphatics (Unadj.)	7500	8160	109	8220	110	1	70-130/25
	C9- C10 Aromatics (Unadj.)	2500	2620	105	2600	104	1	70-130/25

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
615-59-8	2,5-Dibromotoluene	83%	93%	70-130%
615-59-8	2,5-Dibromotoluene	80%	89%	70-130%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M96289
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M96285-3MS	BH17841.D	1	12/08/10	WS	n/a	n/a	GBH929
M96285-3MSD	BH17842.D	1	12/08/10	WS	n/a	n/a	GBH929
M96285-3	BH17840.D	1	12/08/10	WS	n/a	n/a	GBH929

The QC reported here applies to the following samples: Method: MADEP VPH REV 1.1

M96289-1, M96289-2, M96289-3, M96289-4

CAS No.	Compound	M96285-3 ug/kg	Spike Q	ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
---------	----------	-------------------	------------	-------	-------------	---------	--------------	----------	-----	-------------------

CAS No.	Surrogate Recoveries	MS	MSD	M96285-3	Limits
615-59-8	2,5-Dibromotoluene	125%	122%	109%	70-130%
615-59-8	2,5-Dibromotoluene	122%	118%	104%	70-130%

Volatile Surrogate Recovery Summary

Page 1 of 1

Job Number: M96289
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Method: MADEP VPH REV 1.1 **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a	S1 ^b
M96289-1	BH17848.D	223.0* ^c	134.0* ^c
M96289-1	BH17833.D	248.0* ^c	176.0* ^c
M96289-2	BH17834.D	129.0	130.0
M96289-3	BH17835.D	120.0	113.0
M96289-4	BH17836.D	113.0	109.0
GBH929-BSD1	BH17819.D	93.0	89.0
GBH929-BSP1	BH17820.D	83.0	80.0
GBH929-MB	BH17817.D	72.0	70.0
M96285-3MS	BH17841.D	125.0	122.0
M96285-3MSD	BH17842.D	122.0	118.0

Surrogate Compounds **Recovery Limits**

S1 = 2,5-Dibromotoluene 70-130%

- (a) Recovery from GC signal #1
- (b) Recovery from GC signal #2
- (c) Outside control limits due to matrix interference. Confirmed by reanalysis.

7.4.1

7

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: M96289
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23590-MB	BI2720.D	1	12/13/10	JD	12/10/10	OP23590	GBI102

The QC reported here applies to the following samples: Method: MADEP EPH REV 1.1
M96289-1, M96289-2, M96289-3, M96289-4

CAS No.	Compound	Result	RL	Units	Q
	C11-C22 Aromatics (Unadj.)	ND	18000	ug/kg	
	C9-C18 Aliphatics	ND	8800	ug/kg	
	C19-C36 Aliphatics	ND	8800	ug/kg	
	C11-C22 Aromatics	ND	18000	ug/kg	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	84% 40-140%
321-60-8	2-Fluorobiphenyl	86% 40-140%
580-13-2	2-Bromonaphthalene	43% 40-140%
3386-33-2	1-Chlorooctadecane	57% 40-140%

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 1

Job Number: M96289

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23590-BS	BI2721.D	1	12/13/10	JD	12/10/10	OP23590	GBI102
OP23590-BSD	BI2722.D	1	12/13/10	JD	12/10/10	OP23590	GBI102

The QC reported here applies to the following samples:

Method: MADEP EPH REV 1.1

M96289-1, M96289-2, M96289-3, M96289-4

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
	C11-C22 Aromatics (Unadj.)	69000	75800	110 ^a	74700	104	1	40-140/25
	C9-C18 Aliphatics	25900	16400	63	16800	63	2	40-140/25
	C19-C36 Aliphatics	34500	23800	69	25000	70	5	40-140/25

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
84-15-1	o-Terphenyl	93%	85%	40-140%
321-60-8	2-Fluorobiphenyl	92%	86%	40-140%
580-13-2	2-Bromonaphthalene	46%	56%	40-140%
3386-33-2	1-Chlorooctadecane	52%	48%	40-140%

Sample	Compound	Col #1	Col #2	Breakthrough	Limit
OP23590-BS	2-Methylnaphthalene	3070	467	13.2% *	5.0
OP23590-BS	Naphthalene	2680	681	20.3% *	5.0
OP23590-BSD	2-Methylnaphthalene	3410	42.8	1.2%	5.0
OP23590-BSD	Naphthalene	3160	95.2	2.9%	5.0

(a) Aromatic breakthrough (naphthalene and/or 2-methylnaphthalene) exceeded 5% method limit. Results confirmed by refractionation.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: M96289
Account: HALEYALD Haley & Aldrich
Project: Former Energy International Parcel, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23590-MS	BI2729.D	1	12/13/10	JD	12/10/10	OP23590	GBI102
OP23590-MSD	BI2731.D	1	12/13/10	JD	12/10/10	OP23590	GBI102
M96289-4	BI2740.D	1	12/14/10	JD	12/10/10	OP23590	GBI102

The QC reported here applies to the following samples:

Method: MADEP EPH REV 1.1

M96289-1, M96289-2, M96289-3, M96289-4

CAS No.	Compound	M96289-4 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
	C11-C22 Aromatics (Unadj.)	219000	75400	261000	56	393000	221* a	40* b	40-140/25
	C9-C18 Aliphatics	ND	28300	21800	77	25400	86	15	40-140/25
	C19-C36 Aliphatics	22500	37700	37600	40	43400	53	14	40-140/25

CAS No.	Surrogate Recoveries	MS	MSD	M96289-4	Limits
84-15-1	o-Terphenyl	113%	130%	117%	40-140%
321-60-8	2-Fluorobiphenyl	82%	86%	91%	40-140%
580-13-2	2-Bromonaphthalene	64%	58%	64%	40-140%
3386-33-2	1-Chlorooctadecane	45%	49%	46%	40-140%

(a) Outside control limits due to high level in sample relative to spike amount.

(b) Outside control limits due to possible matrix interference.

Semivolatile Surrogate Recovery Summary

Page 1 of 1

Job Number: M96289

Account: HALEYALD Haley & Aldrich

Project: Former Energy International Parcel, MA

Method: MADEP EPH REV 1.1

Matrix: SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a	S2 ^a	S3 ^a	S4 ^b
M96289-1	BI2782.D	78.0	127.0	231.0* ^c	49.0
M96289-2	BI2784.D	122.0	100.0	78.0	38.0* ^c
M96289-3	BI2725.D	92.0	88.0	66.0	40.0
M96289-4	BI2740.D	117.0	91.0	64.0	46.0
OP23590-BS	BI2721.D	93.0	92.0	46.0	52.0
OP23590-BSD	BI2722.D	85.0	86.0	56.0	48.0
OP23590-MB	BI2720.D	84.0	86.0	43.0	57.0
OP23590-MS	BI2729.D	113.0	82.0	64.0	45.0
OP23590-MSD	BI2731.D	130.0	86.0	58.0	49.0

Surrogate Compounds

Recovery Limits

S1 = o-Terphenyl	40-140%
S2 = 2-Fluorobiphenyl	40-140%
S3 = 2-Bromonaphthalene	40-140%
S4 = 1-Chlorooctadecane	40-140%

(a) Recovery from GC signal #1

(b) Recovery from GC signal #2

(c) Outside control limits due to possible matrix interference. Confirmed by refractionation.

8.4.1

8

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M96289
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16338
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 12/06/10

Metal	RL	IDL	MDL	MB raw	final
Aluminum	20	1.5	1.5		
Antimony	1.0	.09	.12	-0.010	<1.0
Arsenic	1.0	.1	.13	-0.010	<1.0
Barium	5.0	.042	.2	0.18	<5.0
Beryllium	0.40	.014	.015	0.0	<0.40
Boron	10	.033	.12		
Cadmium	0.40	.011	.017	0.0	<0.40
Calcium	500	2.3	2.3		
Chromium	1.0	.047	.047	0.060	<1.0
Cobalt	5.0	.017	.017		
Copper	2.5	.086	.15		
Gold	5.0	.16	.16		
Iron	10	.39	.54		
Lead	1.0	.15	.15	0.030	<1.0
Magnesium	500	3.7	4.2		
Manganese	1.5	.011	.092		
Molybdenum	10	.021	.026		
Nickel	4.0	.021	.028	0.030	<4.0
Palladium	5.0	.24	.24		
Platinum	5.0	.73	.73		
Potassium	500	2.9	3.6		
Selenium	1.0	.11	.19	0.030	<1.0
Silicon	10	.12	.47		
Silver	0.50	.06	.06	0.050	<0.50
Sodium	500	1.5	4.2		
Strontium	1.0	.013	.015		
Thallium	1.0	.07	.12	0.23	<1.0
Tin	10	.036	.036		
Titanium	5.0	.057	.057		
Tungsten	10	.48	.57		
Vanadium	1.0	.073	.073	0.0	<1.0
Zinc	2.0	.024	.28	0.27	<2.0

Associated samples MP16338: M96289-1, M96289-2, M96289-3, M96289-4

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M96289
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16338
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M96289
 Account: HALEYALD - Haley & Aldrich
 Project: Former Energy International Parcel, MA

QC Batch ID: MP16338
 Matrix Type: SOLID

Methods: SW846 6010C
 Units: mg/kg

Prep Date:

12/06/10

12/06/10

Metal	M96289-4 Original MS		Spikelot MPICP	% Rec	QC Limits	M96289-4 Original DUP		RPD	QC Limits
Aluminum									
Antimony	63.6	63.4	42.2	-0.5 (a)	75-125	63.6	36.8	53.4 (d)	0-20
Arsenic	13.1	52.7	42.2	93.9	75-125	13.1	10.9	18.3	0-20
Barium	97.8	207	169	64.7 (a)	75-125	97.8	48.6	67.2 (d)	0-20
Beryllium	0.28	37.0	42.2	87.1	75-125	0.28	0.29	3.5	0-20
Boron									
Cadmium	0.27	43.2	42.2	101.8	75-125	0.27	0.26	3.8	0-20
Calcium									
Chromium	13.1	55.7	42.2	101.0	75-125	13.1	12.4	5.5	0-20
Cobalt									
Copper									
Gold									
Iron									
Lead	1690	1160	84.3	-628.3(b)	75-125	1690	1010	50.4 (d)	0-20
Magnesium									
Manganese									
Molybdenum									
Nickel	14.5	76.0	42.2	145.8(c)	75-125	14.5	17.2	17.0	0-20
Palladium									
Platinum									
Potassium									
Selenium	0.0	40.0	42.2	94.8	75-125	0.0	0.0	NC	0-20
Silicon									
Silver	5.2	17.9	16.9	75.3	75-125	5.2	0.80	146.7(d)	0-20
Sodium									
Strontium									
Thallium	0.0	39.5	42.2	93.7	75-125	0.0	0.0	NC	0-20
Tin									
Titanium									
Tungsten									
Vanadium	21.1	60.6	42.2	93.7	75-125	21.1	22.1	4.6	0-20
Zinc	340	338	42.2	-4.7 (b)	75-125	340	302	11.8	0-20

Associated samples MP16338: M96289-1, M96289-2, M96289-3, M96289-4

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M96289
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16338
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes

- (*) Outside of QC limits
- (N) Matrix Spike Rec. outside of QC limits
- (anr) Analyte not requested
- (a) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity. Post spike within acceptable range.
- (b) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
- (c) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity. Post spike is not within acceptable range.
- (d) High RPD due to possible matrix interference and/or sample non-homogeneity.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M96289
 Account: HALEYALD - Haley & Aldrich
 Project: Former Energy International Parcel, MA

QC Batch ID: MP16338
 Matrix Type: SOLID

Methods: SW846 6010C
 Units: mg/kg

Prep Date: 12/06/10

12/06/10

Metal	BSP Result	Spikelot MPICP	% Rec	QC Limits	BSD Result	Spikelot MPICP	% Rec	BSD RPD	QC Limit
Aluminum									
Antimony	49.3	50	98.6	80-120	48.7	50	97.4	1.2	20
Arsenic	50.1	50	100.2	80-120	49.4	50	98.8	1.4	20
Barium	187	200	93.5	80-120	182	200	91.0	2.7	20
Beryllium	46.7	50	93.4	80-120	45.3	50	90.6	3.0	20
Boron									
Cadmium	51.6	50	103.2	80-120	50.9	50	101.8	1.4	20
Calcium									
Chromium	49.5	50	99.0	80-120	48.8	50	97.6	1.4	20
Cobalt									
Copper									
Gold									
Iron									
Lead	97.5	100	97.5	80-120	96.6	100	96.6	0.9	20
Magnesium									
Manganese									
Molybdenum									
Nickel	50.4	50	100.8	80-120	49.8	50	99.6	1.2	20
Palladium									
Platinum									
Potassium									
Selenium	50.2	50	100.4	80-120	49.3	50	98.6	1.8	20
Silicon									
Silver	21.0	20	105.0	80-120	20.7	20	103.5	1.4	20
Sodium									
Strontium									
Thallium	51.2	50	102.4	80-120	50.4	50	100.8	1.6	20
Tin									
Titanium									
Tungsten									
Vanadium	51.8	50	103.6	80-120	51.2	50	102.4	1.2	20
Zinc	50.2	50	100.4	80-120	49.4	50	98.8	1.6	20

Associated samples MP16338: M96289-1, M96289-2, M96289-3, M96289-4

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M96289

Account: HALEYALD - Haley & Aldrich

Project: Former Energy International Parcel, MA

QC Batch ID: MP16338

Methods: SW846 6010C

Matrix Type: SOLID

Units: mg/kg

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M96289

Account: HALEYALD - Haley & Aldrich

Project: Former Energy International Parcel, MA

QC Batch ID: MP16338

Methods: SW846 6010C

Matrix Type: SOLID

Units: mg/kg

Prep Date: 12/06/10

Metal	LCS Result	Spikelot MPLCS70	% Rec	QC Limits
Aluminum				
Antimony	78.0	121	64.5	8-219
Arsenic	104	109	95.4	83-117
Barium	287	325	88.3	83-117
Beryllium	81.6	92.1	88.6	84-116
Boron				
Cadmium	114	110	103.6	81-119
Calcium				
Chromium	87.0	93.4	93.1	81-120
Cobalt				
Copper				
Gold				
Iron				
Lead	145	152	95.4	79-121
Magnesium				
Manganese				
Molybdenum				
Nickel	110	109	100.9	81-118
Palladium				
Platinum				
Potassium				
Selenium	201	207	97.1	79-120
Silicon				
Silver	51.8	51.9	99.8	66-134
Sodium				
Strontium				
Thallium	167	171	97.7	78-122
Tin				
Titanium				
Tungsten				
Vanadium	104	110	94.5	77-124
Zinc	283	299	94.6	82-118

Associated samples MP16338: M96289-1, M96289-2, M96289-3, M96289-4

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M96289
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16338
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: M96289
 Account: HALEYALD - Haley & Aldrich
 Project: Former Energy International Parcel, MA

QC Batch ID: MP16338
 Matrix Type: SOLID

Methods: SW846 6010C
 Units: ug/l

Prep Date: 12/06/10

Metal	M96289-4 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony	754	770	2.2	0-10
Arsenic	156	155	0.6	0-10
Barium	1160	1210	4.4	0-10
Beryllium	3.30	3.10	6.1	0-10
Boron				
Cadmium	3.20	2.20	31.3 (a)	0-10
Calcium				
Chromium	156	166	6.4	0-10
Cobalt				
Copper				
Gold				
Iron				
Lead	20000	20200	0.8	0-10
Magnesium				
Manganese				
Molybdenum				
Nickel	171	183	6.8	0-10
Palladium				
Platinum				
Potassium				
Selenium	0.00	0.00	NC	0-10
Silicon				
Silver	61.5	65.7	6.8	0-10
Sodium				
Strontium				
Thallium	0.00	0.00	NC	0-10
Tin				
Titanium				
Tungsten				
Vanadium	250	258	3.3	0-10
Zinc	4030	4450	10.4 (b)	0-10

Associated samples MP16338: M96289-1, M96289-2, M96289-3, M96289-4

9.1.4
9

SERIAL DILUTION RESULTS SUMMARY

Login Number: M96289
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16338
Matrix Type: SOLID

Methods: SW846 6010C
Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

(b) Serial dilution indicates possible matrix interference.

POST DIGESTATE SPIKE SUMMARY

Login Number: M96289
 Account: HALEYALD - Haley & Aldrich
 Project: Former Energy International Parcel, MA

QC Batch ID: MP16338
 Matrix Type: SOLID

Methods: SW846 6010C
 Units: ug/l

Prep Date:

12/06/10

Metal	Sample ml	Final ml	M96289-4 Raw	PS Corr.** ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum									
Antimony	9.9	10.1	753.7	738.7752	1954	.1	150	1485.149	81.8 -
Arsenic									
Barium	9.9	10.1	1160	1137.03	3253	.1	230	2277.228	92.9 -
Beryllium									
Boron									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Gold									
Iron									
Lead									
Magnesium									
Manganese									
Molybdenum									
Nickel	9.9	10.1	171.4	168.0059	743.5	.1	35	346.5347	166.1 -
Palladium									
Platinum									
Potassium									
Selenium									
Silicon									
Silver									
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Tungsten									
Vanadium									
Zinc									

Associated samples MP16338: M96289-1, M96289-2, M96289-3, M96289-4

POST DIGESTATE SPIKE SUMMARY

Login Number: M96289
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16338
Matrix Type: SOLID

Methods: SW846 6010C
Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(**) Corr. sample result = Raw * (sample volume / final volume)
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M96289
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16345
Matrix Type: SOLID

Methods: SW846 7471A
Units: mg/kg

Prep Date: 12/07/10

Metal	RL	IDL	MDL	MB raw	final
-------	----	-----	-----	-----------	-------

Mercury	0.033	.0047	.0055	0.0058	<0.033
---------	-------	-------	-------	--------	--------

Associated samples MP16345: M96289-1, M96289-2, M96289-3, M96289-4

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M96289
 Account: HALEYALD - Haley & Aldrich
 Project: Former Energy International Parcel, MA

QC Batch ID: MP16345
 Matrix Type: SOLID

Methods: SW846 7471A
 Units: mg/kg

Prep Date: 12/07/10 12/07/10

Metal	M96289-4 Original MS		Spikelot HGRWS1	% Rec	QC Limits	M96289-4 Original DUP		RPD	QC Limits
Mercury	1.6	2.2	0.518	115.8	75-125	1.6	1.7	6.1	0-20

Associated samples MP16345: M96289-1, M96289-2, M96289-3, M96289-4

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M96289
 Account: HALEYALD - Haley & Aldrich
 Project: Former Energy International Parcel, MA

QC Batch ID: MP16345
 Matrix Type: SOLID

Methods: SW846 7471A
 Units: mg/kg

Prep Date: 12/07/10 12/07/10

Metal	BSP Result	Spikelot HGRWS1	% Rec	QC Limits	BSD Result	Spikelot HGRWS1	% Rec	BSD RPD	QC Limit
Mercury	0.50	0.5	100.0	80-120	0.51	0.5	102.0	2.0	30

Associated samples MP16345: M96289-1, M96289-2, M96289-3, M96289-4

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M96289
 Account: HALEYALD - Haley & Aldrich
 Project: Former Energy International Parcel, MA

QC Batch ID: MP16345
 Matrix Type: SOLID

Methods: SW846 7471A
 Units: mg/kg

Prep Date: 12/07/10

Metal	LCS Result	Spikelot HGLCS69	% Rec	QC Limits
-------	---------------	---------------------	-------	--------------

Mercury	15.8	16.3	96.9	71-129
---------	------	------	------	--------

Associated samples MP16345: M96289-1, M96289-2, M96289-3, M96289-4

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M96289
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16354
Matrix Type: LEACHATE

Methods: SW846 6010C
Units: mg/l

Prep Date: 12/09/10

Metal	RL	IDL	MDL	MB raw	final
Aluminum	0.20	.015	.015		
Antimony	0.0060	.0009	.0012		
Arsenic	0.010	.001	.0019		
Barium	0.50	.00042	.0037		
Beryllium	0.0040	.00014	.0002		
Boron	0.10	.00033	.0015		
Cadmium	0.0040	.00011	.00012		
Calcium	5.0	.023	.039		
Chromium	0.010	.00047	.00053		
Cobalt	0.050	.00017	.00028		
Copper	0.025	.00086	.00086		
Gold	0.050	.0016	.0017		
Iron	0.10	.0039	.0041		
Lead	0.010	.0015	.0015	0.0013	<0.010
Magnesium	5.0	.037	.037		
Manganese	0.015	.00011	.0009		
Molybdenum	0.10	.00021	.00064		
Nickel	0.040	.00021	.0003		
Palladium	0.050	.0024	.0025		
Platinum	0.050	.0073	.0073		
Potassium	5.0	.029	.03		
Selenium	0.010	.0011	.0017		
Silicon	0.10	.0012	.0072		
Silver	0.0050	.0006	.0006		
Sodium	5.0	.015	.031		
Strontium	0.010	.00013	.00031		
Thallium	0.0050	.0007	.00074		
Tin	0.10	.00036	.00043		
Titanium	0.050	.00057	.00057		
Tungsten	0.10	.0048	.012		
Vanadium	0.010	.00073	.0011		
Zinc	0.10	.00024	.002		

Associated samples MP16354: M96289-2A, M96289-3A, M96289-4A

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M96289
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16354
Matrix Type: LEACHATE

Methods: SW846 6010C
Units: mg/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M96289
 Account: HALEYALD - Haley & Aldrich
 Project: Former Energy International Parcel, MA

QC Batch ID: MP16354
 Matrix Type: LEACHATE

Methods: SW846 6010C
 Units: mg/l

Prep Date: 12/09/10 12/09/10

Metal	M96199-5A Original MS		Spikelot MPICP % Rec		QC Limits	M96289-4A Original LS		Spikelot MPICP % Rec		QC Limits
Aluminum										
Antimony										
Arsenic	anr									
Barium	anr									
Beryllium										
Boron										
Cadmium	anr									
Calcium										
Chromium	anr									
Cobalt										
Copper										
Gold										
Iron										
Lead	0.56	1.5	1.0	94.0	75-125	1.9	2.9	1.0	100.0	75-125
Magnesium										
Manganese										
Molybdenum										
Nickel										
Palladium										
Platinum										
Potassium										
Selenium	anr									
Silicon										
Silver	anr									
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Tungsten										
Vanadium										
Zinc										

Associated samples MP16354: M96289-2A, M96289-3A, M96289-4A

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M96289
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16354
Matrix Type: LEACHATE

Methods: SW846 6010C
Units: mg/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M96289
 Account: HALEYALD - Haley & Aldrich
 Project: Former Energy International Parcel, MA

QC Batch ID: MP16354
 Matrix Type: LEACHATE

Methods: SW846 6010C
 Units: mg/l

Prep Date: 12/09/10

Metal	M96289-4A Original DUP		RPD	QC Limits
Aluminum				
Antimony				
Arsenic	anr			
Barium	anr			
Beryllium				
Boron				
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt				
Copper				
Gold				
Iron				
Lead	1.9	1.9	0.0	0-20
Magnesium				
Manganese				
Molybdenum				
Nickel				
Palladium				
Platinum				
Potassium				
Selenium	anr			
Silicon				
Silver	anr			
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Tungsten				
Vanadium				
Zinc				

Associated samples MP16354: M96289-2A, M96289-3A, M96289-4A

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M96289
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16354
Matrix Type: LEACHATE

Methods: SW846 6010C
Units: mg/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M96289

Account: HALEYALD - Haley & Aldrich

Project: Former Energy International Parcel, MA

QC Batch ID: MP16354
Matrix Type: LEACHATEMethods: SW846 6010C
Units: mg/l

Prep Date: 12/09/10

12/09/10

Metal	BSP Result	Spikelot MPICP	% Rec	QC Limits	BSD Result	Spikelot MPICP	% Rec	BSD RPD	QC Limit
Aluminum									
Antimony									
Arsenic	anr								
Barium	anr								
Beryllium									
Boron									
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper									
Gold									
Iron									
Lead	0.91	1.0	91.0	80-120	0.91	1.0	91.0	0.0	20
Magnesium									
Manganese									
Molybdenum									
Nickel									
Palladium									
Platinum									
Potassium									
Selenium	anr								
Silicon									
Silver	anr								
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Tungsten									
Vanadium									
Zinc									

Associated samples MP16354: M96289-2A, M96289-3A, M96289-4A

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M96289

Account: HALEYALD - Haley & Aldrich

Project: Former Energy International Parcel, MA

QC Batch ID: MP16354

Methods: SW846 6010C

Matrix Type: LEACHATE

Units: mg/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: M96289
 Account: HALEYALD - Haley & Aldrich
 Project: Former Energy International Parcel, MA

QC Batch ID: MP16354
 Matrix Type: LEACHATE

Methods: SW846 6010C
 Units: ug/l

Prep Date: 12/09/10

Metal	M96199-5A Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic	anr			
Barium	anr			
Beryllium				
Boron				
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt				
Copper				
Gold				
Iron				
Lead	555	576	3.6	0-10
Magnesium				
Manganese				
Molybdenum				
Nickel				
Palladium				
Platinum				
Potassium				
Selenium	anr			
Silicon				
Silver	anr			
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Tungsten				
Vanadium				
Zinc				

Associated samples MP16354: M96289-2A, M96289-3A, M96289-4A

SERIAL DILUTION RESULTS SUMMARY

Login Number: M96289
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

QC Batch ID: MP16354
Matrix Type: LEACHATE

Methods: SW846 6010C
Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

9.3.4

9

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: M96289
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Cyanide Reactivity	GP12387/GN33647	1.5	<1.5	mg/kg	250	30.0	12.0	-%
Sulfide Reactivity	GP12388/GN33648	50	<50	mg/kg	400	400	100.0	-%

Associated Samples:

Batch GP12387: M96289-1, M96289-2, M96289-3, M96289-4

Batch GP12388: M96289-1, M96289-2, M96289-3, M96289-4

(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: M96289
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Corrosivity as pH	GN33617	M96225-8		7.7	7.7	0.0	0-%
Corrosivity as pH	GN33618	M96289-3		7.0	7.0	0.0	0-%
Cyanide Reactivity	GP12387/GN33647	M96289-4	mg/kg	<1.7	<1.7	0.0	0-20%
Ignitability (Flashpoint)	GN33658	M96289-4	Deg. F	>230	>230	0.0	0-20%
Redox Potential Vs H2	GN33622	M96225-8	mv	426	423(a)	0.7(a)	0-20%
Redox Potential Vs H2	GN33623	M96199-6	mv	326	323(a)	0.9(a)	0-20%
Solids, Percent	GN33620	M96289-4	%	90.5	90.6	0.1	0-20%
Sulfide Reactivity	GP12388/GN33648	M96289-4	mg/kg	<55	<55	0.0	0-20%

Associated Samples:

Batch GN33617: M96289-1, M96289-2
Batch GN33618: M96289-3, M96289-4
Batch GN33620: M96289-1, M96289-2, M96289-3, M96289-4
Batch GN33622: M96289-1, M96289-2
Batch GN33623: M96289-3, M96289-4
Batch GN33658: M96289-1, M96289-2, M96289-3, M96289-4
Batch GP12387: M96289-1, M96289-2, M96289-3, M96289-4
Batch GP12388: M96289-1, M96289-2, M96289-3, M96289-4

(*) Outside of QC limits

(a) Analysis requested after recommended holding time.

10.2
10

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: M96289
Account: HALEYALD - Haley & Aldrich
Project: Former Energy International Parcel, MA

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Cyanide Reactivity	GP12387/GN33647	M96289-4	mg/kg	<1.7	276	32.2	11.7	-%
Sulfide Reactivity	GP12388/GN33648	M96289-4	mg/kg	<55	442	387	87.6	-%

Associated Samples:

Batch GP12387: M96289-1, M96289-2, M96289-3, M96289-4

Batch GP12388: M96289-1, M96289-2, M96289-3, M96289-4

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits



ANALYTICAL REPORT

Lab Number:	L1203630
Client:	Haley & Aldrich, Inc. 465 Medford Street, Suite 2200 Charlestown, MA 02129-1400
ATTN:	Cole Worthy
Phone:	(617) 886-7341
Project Name:	FMR ENERGY INT. PARCEL
Project Number:	06318-520
Report Date:	03/08/12

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), USDA (Permit #P-330-11-00240), NC (666), TX (T104704476), DOD (L2217), US Army Corps of Engineers.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: FMR ENERGY INT. PARCEL
Project Number: 06318-520

Lab Number: L1203630
Report Date: 03/08/12

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1203630-01	HA-202 S1	495 TECH CTR.	03/02/12 08:45
L1203630-02	HA-202 S2	495 TECH CTR.	03/02/12 09:00
L1203630-03	HA-202 S3	495 TECH CTR.	03/02/12 09:10
L1203630-04	HA-202 S4	495 TECH CTR.	03/02/12 09:20
L1203630-05	HA-202 S5	495 TECH CTR.	03/02/12 09:30
L1203630-06	HA-203 S1	495 TECH CTR.	03/02/12 09:45
L1203630-07	HA-203 S2	495 TECH CTR.	03/02/12 09:50
L1203630-08	HA-203 S3	495 TECH CTR.	03/02/12 09:55
L1203630-09	HA-203 S4	495 TECH CTR.	03/02/12 10:10
L1203630-10	HA-203 S5	495 TECH CTR.	03/02/12 10:15

Project Name: FMR ENERGY INT. PARCEL

Lab Number: L1203630

Project Number: 06318-520

Report Date: 03/08/12

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES
A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	YES
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	YES
For any questions answered "No", please refer to the case narrative section on the following page(s).		

Please note that sample matrix information is located in the Sample Results section of this report.



Project Name: FMR ENERGY INT. PARCEL
Project Number: 06318-520

Lab Number: L1203630
Report Date: 03/08/12

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

Please contact Client Services at 800-624-9220 with any questions.

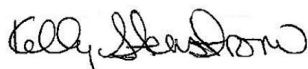
MCP Related Narratives

Report Submission

All MCP required questions were answered with affirmative responses; therefore, there are no relevant protocol-specific QC and/or performance standard non-conformances to report.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Kelly Stenstrom

Title: Technical Director/Representative

Date: 03/08/12

ORGANICS

PCBS

Project Name: FMR ENERGY INT. PARCEL**Lab Number:** L1203630**Project Number:** 06318-520**Report Date:** 03/08/12**SAMPLE RESULTS**

Lab ID: L1203630-01
Client ID: HA-202 S1
Sample Location: 495 TECH CTR.
Matrix: Soil
Analytical Method: 97,8082
Analytical Date: 03/05/12 12:42
Analyst: KB
Percent Solids: 94%

Date Collected: 03/02/12 08:45
Date Received: 03/02/12
Field Prep: Not Specified
Extraction Method: EPA 3540C
Extraction Date: 03/03/12 01:35
Cleanup Method1: EPA 3665A
Cleanup Date1: 03/05/12
Cleanup Method2: EPA 3660B
Cleanup Date2: 03/05/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	35.4	--	1
Aroclor 1221	ND		ug/kg	35.4	--	1
Aroclor 1232	ND		ug/kg	35.4	--	1
Aroclor 1242	ND		ug/kg	35.4	--	1
Aroclor 1248	158		ug/kg	35.4	--	1
Aroclor 1254	190		ug/kg	35.4	--	1
Aroclor 1260	125		ug/kg	35.4	--	1
Aroclor 1262	ND		ug/kg	35.4	--	1
Aroclor 1268	ND		ug/kg	35.4	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	78		30-150
Decachlorobiphenyl	82		30-150
2,4,5,6-Tetrachloro-m-xylene	68		30-150
Decachlorobiphenyl	84		30-150

Project Name: FMR ENERGY INT. PARCEL**Lab Number:** L1203630**Project Number:** 06318-520**Report Date:** 03/08/12**SAMPLE RESULTS**

Lab ID: L1203630-02
Client ID: HA-202 S2
Sample Location: 495 TECH CTR.
Matrix: Soil
Analytical Method: 97,8082
Analytical Date: 03/05/12 12:55
Analyst: KB
Percent Solids: 85%

Date Collected: 03/02/12 09:00
Date Received: 03/02/12
Field Prep: Not Specified
Extraction Method: EPA 3540C
Extraction Date: 03/03/12 01:35
Cleanup Method1: EPA 3665A
Cleanup Date1: 03/05/12
Cleanup Method2: EPA 3660B
Cleanup Date2: 03/05/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	38.6	--	1
Aroclor 1221	ND		ug/kg	38.6	--	1
Aroclor 1232	ND		ug/kg	38.6	--	1
Aroclor 1242	ND		ug/kg	38.6	--	1
Aroclor 1248	233		ug/kg	38.6	--	1
Aroclor 1262	ND		ug/kg	38.6	--	1
Aroclor 1268	ND		ug/kg	38.6	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	74		30-150
Decachlorobiphenyl	84		30-150
2,4,5,6-Tetrachloro-m-xylene	67		30-150
Decachlorobiphenyl	89		30-150

Project Name: FMR ENERGY INT. PARCEL**Lab Number:** L1203630**Project Number:** 06318-520**Report Date:** 03/08/12**SAMPLE RESULTS**

Lab ID: L1203630-02
Client ID: HA-202 S2
Sample Location: 495 TECH CTR.
Matrix: Soil
Analytical Method: 97,8082
Analytical Date: 03/05/12 12:55
Analyst: KB
Percent Solids: 85%

Date Collected: 03/02/12 09:00
Date Received: 03/02/12
Field Prep: Not Specified
Extraction Method: EPA 3540C
Extraction Date: 03/03/12 01:35
Cleanup Method1: EPA 3665A
Cleanup Date1: 03/05/12
Cleanup Method2: EPA 3660B
Cleanup Date2: 03/05/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1254	319		ug/kg	38.6	--	1
Aroclor 1260	177		ug/kg	38.6	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	74		30-150
Decachlorobiphenyl	84		30-150
2,4,5,6-Tetrachloro-m-xylene	67		30-150
Decachlorobiphenyl	89		30-150

Project Name: FMR ENERGY INT. PARCEL
Project Number: 06318-520

Lab Number: L1203630
Report Date: 03/08/12

SAMPLE RESULTS

Lab ID: L1203630-03
 Client ID: HA-202 S3
 Sample Location: 495 TECH CTR.
 Matrix: Soil
 Analytical Method: 97,8082
 Analytical Date: 03/05/12 13:07
 Analyst: KB
 Percent Solids: 78%

Date Collected: 03/02/12 09:10
 Date Received: 03/02/12
 Field Prep: Not Specified
 Extraction Method: EPA 3540C
 Extraction Date: 03/03/12 01:35
 Cleanup Method1: EPA 3665A
 Cleanup Date1: 03/05/12
 Cleanup Method2: EPA 3660B
 Cleanup Date2: 03/05/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	41.0	--	1
Aroclor 1221	ND		ug/kg	41.0	--	1
Aroclor 1232	ND		ug/kg	41.0	--	1
Aroclor 1242	ND		ug/kg	41.0	--	1
Aroclor 1248	ND		ug/kg	41.0	--	1
Aroclor 1254	ND		ug/kg	41.0	--	1
Aroclor 1260	ND		ug/kg	41.0	--	1
Aroclor 1262	ND		ug/kg	41.0	--	1
Aroclor 1268	ND		ug/kg	41.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	77		30-150
Decachlorobiphenyl	81		30-150
2,4,5,6-Tetrachloro-m-xylene	70		30-150
Decachlorobiphenyl	88		30-150

Project Name: FMR ENERGY INT. PARCEL**Lab Number:** L1203630**Project Number:** 06318-520**Report Date:** 03/08/12**SAMPLE RESULTS**

Lab ID: L1203630-06
Client ID: HA-203 S1
Sample Location: 495 TECH CTR.
Matrix: Soil
Analytical Method: 97,8082
Analytical Date: 03/05/12 13:19
Analyst: KB
Percent Solids: 84%

Date Collected: 03/02/12 09:45
Date Received: 03/02/12
Field Prep: Not Specified
Extraction Method: EPA 3540C
Extraction Date: 03/03/12 01:35
Cleanup Method1: EPA 3665A
Cleanup Date1: 03/05/12
Cleanup Method2: EPA 3660B
Cleanup Date2: 03/05/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	39.5	--	1
Aroclor 1221	ND		ug/kg	39.5	--	1
Aroclor 1232	ND		ug/kg	39.5	--	1
Aroclor 1242	ND		ug/kg	39.5	--	1
Aroclor 1248	155		ug/kg	39.5	--	1
Aroclor 1254	150		ug/kg	39.5	--	1
Aroclor 1262	ND		ug/kg	39.5	--	1
Aroclor 1268	ND		ug/kg	39.5	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	73		30-150
Decachlorobiphenyl	79		30-150
2,4,5,6-Tetrachloro-m-xylene	67		30-150
Decachlorobiphenyl	88		30-150

Project Name: FMR ENERGY INT. PARCEL**Lab Number:** L1203630**Project Number:** 06318-520**Report Date:** 03/08/12**SAMPLE RESULTS**

Lab ID: L1203630-06
Client ID: HA-203 S1
Sample Location: 495 TECH CTR.
Matrix: Soil
Analytical Method: 97,8082
Analytical Date: 03/05/12 13:19
Analyst: KB
Percent Solids: 84%

Date Collected: 03/02/12 09:45
Date Received: 03/02/12
Field Prep: Not Specified
Extraction Method: EPA 3540C
Extraction Date: 03/03/12 01:35
Cleanup Method1: EPA 3665A
Cleanup Date1: 03/05/12
Cleanup Method2: EPA 3660B
Cleanup Date2: 03/05/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1260	101		ug/kg	39.5	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	73		30-150
Decachlorobiphenyl	79		30-150
2,4,5,6-Tetrachloro-m-xylene	67		30-150
Decachlorobiphenyl	88		30-150

Project Name: FMR ENERGY INT. PARCEL**Lab Number:** L1203630**Project Number:** 06318-520**Report Date:** 03/08/12**SAMPLE RESULTS**

Lab ID: L1203630-07
Client ID: HA-203 S2
Sample Location: 495 TECH CTR.
Matrix: Soil
Analytical Method: 97,8082
Analytical Date: 03/05/12 13:32
Analyst: KB
Percent Solids: 90%

Date Collected: 03/02/12 09:50
Date Received: 03/02/12
Field Prep: Not Specified
Extraction Method: EPA 3540C
Extraction Date: 03/03/12 01:35
Cleanup Method1: EPA 3665A
Cleanup Date1: 03/05/12
Cleanup Method2: EPA 3660B
Cleanup Date2: 03/05/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	35.1	--	1
Aroclor 1221	ND		ug/kg	35.1	--	1
Aroclor 1232	ND		ug/kg	35.1	--	1
Aroclor 1242	ND		ug/kg	35.1	--	1
Aroclor 1248	73.5		ug/kg	35.1	--	1
Aroclor 1262	ND		ug/kg	35.1	--	1
Aroclor 1268	ND		ug/kg	35.1	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	74		30-150
Decachlorobiphenyl	80		30-150
2,4,5,6-Tetrachloro-m-xylene	69		30-150
Decachlorobiphenyl	90		30-150

Project Name: FMR ENERGY INT. PARCEL**Lab Number:** L1203630**Project Number:** 06318-520**Report Date:** 03/08/12**SAMPLE RESULTS**

Lab ID: L1203630-07
Client ID: HA-203 S2
Sample Location: 495 TECH CTR.
Matrix: Soil
Analytical Method: 97,8082
Analytical Date: 03/05/12 13:32
Analyst: KB
Percent Solids: 90%

Date Collected: 03/02/12 09:50
Date Received: 03/02/12
Field Prep: Not Specified
Extraction Method: EPA 3540C
Extraction Date: 03/03/12 01:35
Cleanup Method1: EPA 3665A
Cleanup Date1: 03/05/12
Cleanup Method2: EPA 3660B
Cleanup Date2: 03/05/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1254	102		ug/kg	35.1	--	1
Aroclor 1260	96.1		ug/kg	35.1	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	74		30-150
Decachlorobiphenyl	80		30-150
2,4,5,6-Tetrachloro-m-xylene	69		30-150
Decachlorobiphenyl	90		30-150

Project Name: FMR ENERGY INT. PARCEL
Project Number: 06318-520

Lab Number: L1203630
Report Date: 03/08/12

SAMPLE RESULTS

Lab ID: L1203630-08
 Client ID: HA-203 S3
 Sample Location: 495 TECH CTR.
 Matrix: Soil
 Analytical Method: 97,8082
 Analytical Date: 03/05/12 13:44
 Analyst: KB
 Percent Solids: 87%

Date Collected: 03/02/12 09:55
 Date Received: 03/02/12
 Field Prep: Not Specified
 Extraction Method: EPA 3540C
 Extraction Date: 03/03/12 01:35
 Cleanup Method1: EPA 3665A
 Cleanup Date1: 03/05/12
 Cleanup Method2: EPA 3660B
 Cleanup Date2: 03/05/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	36.7	--	1
Aroclor 1221	ND		ug/kg	36.7	--	1
Aroclor 1232	ND		ug/kg	36.7	--	1
Aroclor 1242	ND		ug/kg	36.7	--	1
Aroclor 1248	ND		ug/kg	36.7	--	1
Aroclor 1254	ND		ug/kg	36.7	--	1
Aroclor 1260	ND		ug/kg	36.7	--	1
Aroclor 1262	ND		ug/kg	36.7	--	1
Aroclor 1268	ND		ug/kg	36.7	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	75		30-150
Decachlorobiphenyl	75		30-150
2,4,5,6-Tetrachloro-m-xylene	71		30-150
Decachlorobiphenyl	83		30-150

Project Name: FMR ENERGY INT. PARCEL**Lab Number:** L1203630**Project Number:** 06318-520**Report Date:** 03/08/12

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8082
 Analytical Date: 03/05/12 16:12
 Analyst: KB

Extraction Method: EPA 3540C
 Extraction Date: 03/03/12 01:35
 Cleanup Method1: EPA 3665A
 Cleanup Date1: 03/05/12
 Cleanup Method2: EPA 3660B
 Cleanup Date2: 03/05/12

Parameter	Result	Qualifier	Units	RL	MDL
MCP Polychlorinated Biphenyls - Westborough Lab for sample(s): 01-03,06-08 Batch: WG521226-1					
Aroclor 1016	ND		ug/kg	31.5	--
Aroclor 1221	ND		ug/kg	31.5	--
Aroclor 1232	ND		ug/kg	31.5	--
Aroclor 1242	ND		ug/kg	31.5	--
Aroclor 1248	ND		ug/kg	31.5	--
Aroclor 1254	ND		ug/kg	31.5	--
Aroclor 1260	ND		ug/kg	31.5	--
Aroclor 1262	ND		ug/kg	31.5	--
Aroclor 1268	ND		ug/kg	31.5	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	66		30-150
Decachlorobiphenyl	74		30-150
2,4,5,6-Tetrachloro-m-xylene	68		30-150
Decachlorobiphenyl	82		30-150

Lab Control Sample Analysis**Batch Quality Control****Project Name:** FMR ENERGY INT. PARCEL**Lab Number:** L1203630**Project Number:** 06318-520**Report Date:** 03/08/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Polychlorinated Biphenyls - Westborough Lab Associated sample(s): 01-03,06-08 Batch: WG521226-2 WG521226-3								
Aroclor 1016	49		57		40-140	15		30
Aroclor 1260	50		55		40-140	10		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	69		77		30-150
Decachlorobiphenyl	70		71		30-150
2,4,5,6-Tetrachloro-m-xylene	70		73		30-150
Decachlorobiphenyl	79		78		30-150

INORGANICS & MISCELLANEOUS

Project Name: FMR ENERGY INT. PARCEL**Lab Number:** L1203630**Project Number:** 06318-520**Report Date:** 03/08/12**SAMPLE RESULTS****Lab ID:** L1203630-01**Date Collected:** 03/02/12 08:45**Client ID:** HA-202 S1**Date Received:** 03/02/12**Sample Location:** 495 TECH CTR.**Field Prep:** Not Specified**Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	94		%	0.10	NA	1	-	03/06/12 13:30	30,2540G	SD



Project Name: FMR ENERGY INT. PARCEL**Project Number:** 06318-520**Lab Number:** L1203630**Report Date:** 03/08/12**SAMPLE RESULTS****Lab ID:** L1203630-02**Client ID:** HA-202 S2**Sample Location:** 495 TECH CTR.**Matrix:** Soil**Date Collected:** 03/02/12 09:00**Date Received:** 03/02/12**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	85		%	0.10	NA	1	-	03/06/12 13:30	30,2540G	SD



Project Name: FMR ENERGY INT. PARCEL

Lab Number: L1203630

Project Number: 06318-520

Report Date: 03/08/12

SAMPLE RESULTS

Lab ID: L1203630-03

Date Collected: 03/02/12 09:10

Client ID: HA-202 S3

Date Received: 03/02/12

Sample Location: 495 TECH CTR.

Field Prep: Not Specified

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	78		%	0.10	NA	1	-	03/06/12 13:30	30,2540G	SD



Project Name: FMR ENERGY INT. PARCEL**Project Number:** 06318-520**Lab Number:** L1203630**Report Date:** 03/08/12**SAMPLE RESULTS****Lab ID:** L1203630-06**Client ID:** HA-203 S1**Sample Location:** 495 TECH CTR.**Matrix:** Soil**Date Collected:** 03/02/12 09:45**Date Received:** 03/02/12**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	84		%	0.10	NA	1	-	03/06/12 13:30	30,2540G	SD



Project Name: FMR ENERGY INT. PARCEL**Project Number:** 06318-520**Lab Number:** L1203630**Report Date:** 03/08/12**SAMPLE RESULTS****Lab ID:** L1203630-07**Client ID:** HA-203 S2**Sample Location:** 495 TECH CTR.**Matrix:** Soil**Date Collected:** 03/02/12 09:50**Date Received:** 03/02/12**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	90		%	0.10	NA	1	-	03/06/12 13:30	30,2540G	SD



Project Name: FMR ENERGY INT. PARCEL**Project Number:** 06318-520**Lab Number:** L1203630**Report Date:** 03/08/12**SAMPLE RESULTS****Lab ID:** L1203630-08**Client ID:** HA-203 S3**Sample Location:** 495 TECH CTR.**Matrix:** Soil**Date Collected:** 03/02/12 09:55**Date Received:** 03/02/12**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	87		%	0.10	NA	1	-	03/06/12 13:30	30,2540G	SD



Lab Duplicate Analysis
Batch Quality Control**Project Name:** FMR ENERGY INT. PARCEL**Project Number:** 06318-520**Lab Number:** L1203630**Report Date:** 03/08/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-03,06-08 QC Batch ID: WG521647-1 QC Sample: L1203630-01 Client ID: HA-202 S1						
Solids, Total	94	94	%	0		20

Project Name: FMR ENERGY INT. PARCEL**Project Number:** 06318-520**Lab Number:** L1203630**Report Date:** 03/08/12**Sample Receipt and Container Information**

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA**Cooler Information Custody Seal****Cooler**

A Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1203630-01A	Amber 120ml unpreserved	A	N/A	2.8	Y	Absent	TS(7),MCP-8082-10-3540C(365)
L1203630-02A	Amber 120ml unpreserved	A	N/A	2.8	Y	Absent	TS(7),MCP-8082-10-3540C(365)
L1203630-03A	Amber 120ml unpreserved	A	N/A	2.8	Y	Absent	TS(7),MCP-8082-10-3540C(365)
L1203630-04A	Amber 120ml unpreserved	A	N/A	2.8	Y	Absent	HOLD(14)
L1203630-05A	Amber 120ml unpreserved	A	N/A	2.8	Y	Absent	HOLD(14)
L1203630-06A	Amber 120ml unpreserved	A	N/A	2.8	Y	Absent	TS(7),MCP-8082-10-3540C(365)
L1203630-07A	Amber 120ml unpreserved	A	N/A	2.8	Y	Absent	TS(7),MCP-8082-10-3540C(365)
L1203630-08A	Amber 120ml unpreserved	A	N/A	2.8	Y	Absent	TS(7),MCP-8082-10-3540C(365)
L1203630-09A	Amber 120ml unpreserved	A	N/A	2.8	Y	Absent	HOLD(14)
L1203630-10A	Amber 120ml unpreserved	A	N/A	2.8	Y	Absent	HOLD(14)

Container Comments

L1203630-04A

L1203630-05A

L1203630-09A

L1203630-10A

*Values in parentheses indicate holding time in days

Project Name: FMR ENERGY INT. PARCEL
Project Number: 06318-520

Lab Number: L1203630
Report Date: 03/08/12

GLOSSARY

Acronyms

EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NI	- Not Ignitable.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit.
C	- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
D	- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
E	- Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
G	- The concentration may be biased high due to matrix interferences (i.e., co-elution) with non-target compound(s). The result should be considered estimated.
H	- The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
I	- The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported due to obvious interference.
M	- Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
NJ	- Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

Report Format: Data Usability Report



Project Name: FMR ENERGY INT. PARCEL
Project Number: 06318-520

Lab Number: L1203630
Report Date: 03/08/12

Data Qualifiers

- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the reporting limit (RL) for the sample.

Project Name: FMR ENERGY INT. PARCEL
Project Number: 06318-520

Lab Number: L1203630
Report Date: 03/08/12

REFERENCES

- 30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.
- 97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certificate/Approval Program Summary

Last revised January 30, 2012 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0574. **NELAP Accredited Solid Waste/Soil.**

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP), Ethylene Dibromide (EDB), 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223 P/A), E. Coli. – Colilert (SM9223 P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D))

Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E).)

Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Volatile Organics, Acid Extractables (Phenols), 3,3'-Dichlorobenzidine, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Maine Department of Human Services Certificate/Lab ID: 2009024.

Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 353.2, SM2130B, 2320B, 2540C, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, SM2320B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NH3-H, 4500NO3-F, 4500P-B, 4500P-E, 5210B, 5220D, 5310C, 9010B, 9040B, 9030B, 7470A, 7196A, 2340B, EPA 200.7, 6010, 200.8, 6020, 245.1, 1311, 1312, 3005A, Enterolert, 9223D, 9222D. Organic Parameters: 608, 8081, 8082, 8330, 8151A, 624, 8260, 3510C, 3630C, 5030B, ME-DRO, ME-GRO, MA-EPH, MA-VPH.)

Solid Waste/Soil (Inorganic Parameters: 9010B, 9012A, 9014A, 9040B, 9045C, 6010B, 7471A, 7196A, 9050A, 1010, 1030, 9065, 1311, 1312, 3005A, 3050B. Organic Parameters: ME-DRO, ME-GRO, MA-EPH, MA-VPH, 8260B, 8270C, 8330, 8151A, 8081A, 8082, 3540C, 3546, 3580A, 3630C, 5030B, 5035.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.

Drinking Water (Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl) (EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate); (EPA 353.2 for: Nitrate-N, Nitrite-N); (SM4500NO3-F for: Nitrate-N and Nitrite-N); 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B. Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics); (504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), EPA 332. Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; ColilertQT SM9223B; MF-SM9222D.)

Page 30 of 33
for: *Non-Potable Water* (Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn); (EPA 200.7 for: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn); 245.1, SM4500H,B, EPA 120.1,

SM2510B, 2540C, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.

Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics),(608 for: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs-Water), (EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables), 600/4-81-045-PCB-Oil. Microbiology Parameters: (ColilertQT SM9223B;Enterolert-QT: SM9222D-MF.)

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. *NELAP Accredited.*

Drinking Water (Inorganic Parameters: SM 9222B, 9223B, 9215B, EPA 200.7, 200.8, 245.2, 300.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 332.0. Organic Parameters: 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 3005A, 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 350.2, 351.1, 353.2, 410.4, 420.1, 1664A, SW-846 9010, 9030, 9040B, SM426C, SM2120B, 2310B, 2320B, 2540B, 2540D, 4500H+B, 4500CL-E, 4500CN-E, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 5220D, 2510B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3510C, 3630C, 5030B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A, 8151A.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040B, 9045C, 9050C, 9065,1311, 1312, 3005A, 3050B. Organic Parameters: SW-846 3540C, 3546, 3550B, 3580A, 3630C, 5030B, 5035, 8260B, 8270C, 8330, 8151A, 8015B, 8082, 8081A.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. *NELAP Accredited.*

Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500CN-CE, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 200.8, 245.2, 2540C, SM2120B, 2320B, 2510B, 5310C, SM4500H-B. Organic Parameters: EPA 332, 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500CI-E, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM510ABC, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, 9222D, 9221B, 9221C, 9221E, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, 350.2, SW-846 1312, 6020, 6020A, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, 4500CN-CE, EPA 245.1, 245.2, SW-846 9040B, 3005A, 3015, EPA 6010B, 6010C, 7196A, 3060A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3510C, EPA 608, 624, 625, SW-846 3630C, 5030B, 8081A, 8081B, 8082, 8082A, 8151A, 8330, NJ OQA-QAM-025 Rev.7, NJ EPH.)

Solid & Chemical Materials (Inorganic Parameters: SW-846, 6010B, 6010C, 7196A, 3060A, 9010B, 9030B, 1010, 1030, 1311, 1312, 3005A, 3050B, 7471A, 7471B, 9014, 9012A, 9040B, 9045C, 9050A, 9065. Organic Parameters: SW-846 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3540C, 3545, 3546, 3550B, 3580A, 3630C, 5030B, 5035L, 5035H, NJ OQA-QAM-025 Rev.7, NJ EPH.)

New York Department of Health Certificate/Lab ID: 11148. *NELAP Accredited.*

Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500H-B, 4500NO3-F, 2540C, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, 5310C, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, SM4500CL-E, 4500F-C, SM15 426C, EPA 350.1, SM4500NH3-BH, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-04-1-C, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, LACHAT 10-204-00-1-A, EPA 9040B, SM4500-HB, EPA 1664A, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 9010B, 9030B.. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, EPA 3510C, 5030B.)

Solid & Hazardous Waste (Inorganic Parameters: 1010, 1030, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8015B, 8081A, 8151A, 8330, 8082, 3540C, 3545, 3546, 3580, 5030B, 5035.)

North Carolina Department of the Environment and Natural Resources Certificate/Lab ID : 666. Organic Parameters: MA-EPH, MA-VPH.

Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-03671. **NELAP Accredited.**
Drinking Water (Organic Parameters: EPA 524.2, 504.1)

Non-Potable Water (Inorganic Parameters: EPA 1312, 200.7, 410.4, 1664A, SM2540D, 5210B, 5220D, 4500-P, BE. Organic Parameters: EPA 3510C, 3005A, 3630C, 5030B, 625, 624, 608, 8081A, 8081B, 8082, 802A, 8151A, 8260B, 8270C, 8270D, 8330)

Solid & Hazardous Waste (Inorganic Parameters: EPA 350.1, 1010, 1030, 1311, 1312, 3050B, 3060A, 6010B, 6010C, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065, SM 4500NH3-H. Organic Parameters: 3540C, 3546, 3580A, 3630C, 5035, 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8260B, 8270C, 8270D, 8330)

Rhode Island Department of Health Certificate/Lab ID: LAO00065. **NELAP Accredited via NY-DOH.**

Refer to MA-DEP Certificate for Potable and Non-Potable Water.

Refer to NJ-DEP Certificate for Potable and Non-Potable Water.

Texas Commission on Environmental Quality Certificate/Lab ID: T104704476-09-1. **NELAP Accredited.**

Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 S²⁻ D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Virginia Division of Consolidated Laboratory Services Certificate/Lab ID: 460195. **NELAP Accredited.**

Non-Potable Water (Inorganic Parameters: EPA 3005A, 3015, 1312, 6010B, 6010C, SM4500S-D, SM4500-CN-CE, Lachat 10-204-00-1-X. Organic Parameters: EPA 8260B)

Solid & Hazardous Waste (Inorganic Parameters: EPA 3050B, 1311, 1312, 6010B, 6010C, 9030B, 9010B, 9012A, 9014. Organic Parameters: EPA 5035, 5030B, 8260B.)

Department of Defense, L-A-B Certificate/Lab ID: L2217.

Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6020, 245.1, 245.2, 7470A, 9040B, 300.0, 332.0, 6860, 353.2, 410.4, 9060, 1664A, SM 4500CN-E, 4500H-B, 4500NO3-F, 5220D, 5310C, 2320B, 2540C, 3005A, 3015, 9010B, 9056. Organic Parameters: EPA 8260B, 8270C, 8330A, 625, 8082, 8081A, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 7471A, 9010, 9012A, 6860, 1311, 1312, 3050B, 7196A, 9010B, 3500-CR-D, 4500CN-CE, 2540G, Organic Parameters: EPA 8260B, 8270C, 8330A/B-prep, 8082, 8081A, 3540C, 3546, 3580A, 5035A, MassDEP EPH, MassDEP VPH.)

The following analytes are not included in our current NELAP/TNI Scope of Accreditation:

EPA 8260B: Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A**: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C**: Methyl naphthalene, Dimethyl naphthalene, Total Methyl naphthalenes, Total Dimethyl naphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625**: 4-Chloroaniline, 4-Methylphenol. Total Phosphorus in a soil matrix, Chloride in a soil matrix, TKN in a soil matrix, NO₂ in a soil matrix, NO₃ in a soil matrix, SO₄ in a soil matrix.

H&A FILE NO. 06318-520
PROJECT NAME EMC Energy Int. Fund
H&A CONTACT C. Wilster

LABORATORY	<i>Neuro</i>	DELIVERY DATE
ADDRESS	<i>495 Tech Ctr.</i>	TURNAROUND TIME
CONTACT		PROJECT MANAGER

3/2/12
STP
C. W. M. M.

[illegible]

Sampled and Relinquished by		LIQUID										Sampling Comments		
Sign <i>David M. B...</i>	Print <i>David M. B...</i>	Sign <i>Julius A. B...</i>	Print <i>Julius A. B...</i>									VOA Vial		
Firm <i>HPA</i>	Date <i>3/2/12</i> Time <i>1805</i>	Firm <i>HPA</i>	Date <i>3/2/12</i> Time <i>1515</i>									Amber Glass		
Relinquished by	Received by											Plastic Bottle		
Sign <i>Julius A. B...</i>	Print <i>Julius A. B...</i>											Preservative		
Firm <i>HPA</i>	Date <i>3/2/12</i> Time <i>1530</i>											Volume		
Relinquished by	Received by													
Sign <i>Julius A. B...</i>	Print <i>Julius A. B...</i>													
Firm <i>HPA</i>	Date <i>3/2/12</i> Time <i>1530</i>													
Relinquished by	Received by													
Sign <i>Julius A. B...</i>	Print <i>Julius A. B...</i>													
Firm <i>HPA</i>	Date <i>3/2/12</i> Time <i>1530</i>													
Relinquished by	Received by													
Sign <i>Julius A. B...</i>	Print <i>Julius A. B...</i>													
Firm <i>HPA</i>	Date <i>3/2/12</i> Time <i>1530</i>													
Relinquished by	Received by													
Sign <i>Julius A. B...</i>	Print <i>Julius A. B...</i>													
Firm <i>HPA</i>	Date <i>3/2/12</i> Time <i>1530</i>													
Relinquished by	Received by													
Sign <i>Julius A. B...</i>	Print <i>Julius A. B...</i>													
Firm <i>HPA</i>	Date <i>3/2/12</i> Time <i>1530</i>													
Relinquished by	Received by													
Sign <i>Julius A. B...</i>	Print <i>Julius A. B...</i>													
Firm <i>HPA</i>	Date <i>3/2/12</i> Time <i>1530</i>													
Relinquished by	Received by													
Sign <i>Julius A. B...</i>	Print <i>Julius A. B...</i>													
Firm <i>HPA</i>	Date <i>3/2/12</i> Time <i>1530</i>													
Relinquished by	Received by													
Sign <i>Julius A. B...</i>	Print <i>Julius A. B...</i>													
Firm <i>HPA</i>	Date <i>3/2/12</i> Time <i>1530</i>													
Relinquished by	Received by													
Sign <i>Julius A. B...</i>	Print <i>Julius A. B...</i>													
Firm <i>HPA</i>	Date <i>3/2/12</i> Time <i>1530</i>													
Relinquished by	Received by													
Sign <i>Julius A. B...</i>	Print <i>Julius A. B...</i>													
Firm <i>HPA</i>	Date <i>3/2/12</i> Time <i>1530</i>													
Relinquished by	Received by													
Sign <i>Julius A. B...</i>	Print <i>Julius A. B...</i>													
Firm <i>HPA</i>	Date <i>3/2/12</i> Time <i>1530</i>													
Relinquished by	Received by													
Sign <i>Julius A. B...</i>	Print <i>Julius A. B...</i>													
Firm <i>HPA</i>	Date <i>3/2/12</i> Time <i>1530</i>													
Relinquished by	Received by													

If Presumptive Certainty Data Package is needed, initial all sections;

Presumptive Certainty Data Package (Laboratory to use applicable DIP CAM methods)

Required Reporting Limits and Data Quality Objectives

Matrix Spike (MS) samples for MCP Metals and/or Cyanide are included and identified herein.

This Chain of Custody Record (specify) _____ includes _____ ~~✓~~ does not include samples defined as Drinking Water Samples

It was found that Cistocod records identify samples defined as Drinking Water Samples, Tap Blanks and Field Duplicates are included and identified and analysis of TICs are required as appropriate. Laboratory should (specify if applicable) _____ analyze



ANALYTICAL REPORT

Lab Number:	L1203632
Client:	Haley & Aldrich, Inc. 465 Medford Street, Suite 2200 Charlestown, MA 02129-1400
ATTN:	Cole Worthy
Phone:	(617) 886-7341
Project Name:	FMR. ENERGY INT. PARCEL
Project Number:	06318-520
Report Date:	03/08/12

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), USDA (Permit #P-330-11-00240), NC (666), TX (T104704476), DOD (L2217), US Army Corps of Engineers.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: FMR. ENERGY INT. PARCEL
Project Number: 06318-520

Lab Number: L1203632
Report Date: 03/08/12

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1203632-01	HA-204 S1	495 TECH CTR	03/02/12 10:25
L1203632-02	HA-204 S2	495 TECH CTR	03/02/12 10:30
L1203632-03	HA-204 S3	495 TECH CTR	03/02/12 10:35
L1203632-04	HA-204 S4	495 TECH CTR	03/02/12 10:40
L1203632-05	HA-204 S5	495 TECH CTR	03/02/12 10:45
L1203632-06	HA-205 S1	495 TECH CTR	03/02/12 10:55
L1203632-07	HA-205 S2	495 TECH CTR	03/02/12 11:05
L1203632-08	HA-205 S3	495 TECH CTR	03/02/12 11:10
L1203632-09	HA-205 S4	495 TECH CTR	03/02/12 11:15
L1203632-10	HA-205 S5	495 TECH CTR	03/02/12 11:20

Project Name: FMR. ENERGY INT. PARCEL

Lab Number: L1203632

Project Number: 06318-520

Report Date: 03/08/12

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES
A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	NO
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	NO
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	YES
For any questions answered "No", please refer to the case narrative section on the following page(s).		

Please note that sample matrix information is located in the Sample Results section of this report.



Project Name: FMR. ENERGY INT. PARCEL
Project Number: 06318-520

Lab Number: L1203632
Report Date: 03/08/12

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

Please see the associated ADEX data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

Please contact Client Services at 800-624-9220 with any questions.

MCP Related Narratives

PCB

L1203632-02 has elevated detection limits due to the dilution required by matrix interferences encountered during the concentration of the sample.

L1203632-06 has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

In reference to question G:

L1203632-06: One or more of the target analytes did not achieve the requested CAM reporting limits.

Project Name: FMR. ENERGY INT. PARCEL
Project Number: 06318-520

Lab Number: L1203632
Report Date: 03/08/12

Case Narrative (continued)

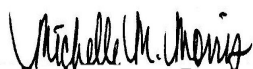
In reference to question H:

The surrogate recovery for L1203632-02 is outside the individual acceptance criteria for Decachlorobiphenyl (193%), but within the overall method allowances. The results of the original analysis are reported; however, all associated compounds are considered to have a potential bias.

The surrogate recoveries for L1203632-06 are below the acceptance criteria for 2,4,5,6-Tetrachloro-m-xylene and Decachlorobiphenyl (all 0%) due to the dilution required to quantitate the sample. Re-extraction was not required; therefore, the results of the original analysis are reported.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:



Michelle M. Morris

Title: Technical Director/Representative

Date: 03/08/12

ORGANICS

PCBS

Project Name: FMR. ENERGY INT. PARCEL**Lab Number:** L1203632**Project Number:** 06318-520**Report Date:** 03/08/12**SAMPLE RESULTS**

Lab ID: L1203632-01
Client ID: HA-204 S1
Sample Location: 495 TECH CTR
Matrix: Soil
Analytical Method: 97,8082
Analytical Date: 03/05/12 13:56
Analyst: KB
Percent Solids: 90%

Date Collected: 03/02/12 10:25
Date Received: 03/02/12
Field Prep: Not Specified
Extraction Method: EPA 3540C
Extraction Date: 03/03/12 01:35
Cleanup Method1: EPA 3665A
Cleanup Date1: 03/05/12
Cleanup Method2: EPA 3660B
Cleanup Date2: 03/05/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	36.9	--	1
Aroclor 1221	ND		ug/kg	36.9	--	1
Aroclor 1232	ND		ug/kg	36.9	--	1
Aroclor 1242	ND		ug/kg	36.9	--	1
Aroclor 1248	ND		ug/kg	36.9	--	1
Aroclor 1262	ND		ug/kg	36.9	--	1
Aroclor 1268	ND		ug/kg	36.9	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	59		30-150
Decachlorobiphenyl	66		30-150
2,4,5,6-Tetrachloro-m-xylene	55		30-150
Decachlorobiphenyl	75		30-150

Project Name: FMR. ENERGY INT. PARCEL**Lab Number:** L1203632**Project Number:** 06318-520**Report Date:** 03/08/12**SAMPLE RESULTS**

Lab ID: L1203632-01
Client ID: HA-204 S1
Sample Location: 495 TECH CTR
Matrix: Soil
Analytical Method: 97,8082
Analytical Date: 03/05/12 13:56
Analyst: KB
Percent Solids: 90%

Date Collected: 03/02/12 10:25
Date Received: 03/02/12
Field Prep: Not Specified
Extraction Method: EPA 3540C
Extraction Date: 03/03/12 01:35
Cleanup Method1: EPA 3665A
Cleanup Date1: 03/05/12
Cleanup Method2: EPA 3660B
Cleanup Date2: 03/05/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1254	67.0		ug/kg	36.9	--	1
Aroclor 1260	117		ug/kg	36.9	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	59		30-150
Decachlorobiphenyl	66		30-150
2,4,5,6-Tetrachloro-m-xylene	55		30-150
Decachlorobiphenyl	75		30-150

Project Name: FMR. ENERGY INT. PARCEL**Lab Number:** L1203632**Project Number:** 06318-520**Report Date:** 03/08/12**SAMPLE RESULTS**

Lab ID: L1203632-02
Client ID: HA-204 S2
Sample Location: 495 TECH CTR
Matrix: Soil
Analytical Method: 97,8082
Analytical Date: 03/08/12 12:21
Analyst: KB
Percent Solids: 87%

Date Collected: 03/02/12 10:30
Date Received: 03/02/12
Field Prep: Not Specified
Extraction Method: EPA 3540C
Extraction Date: 03/07/12 15:50
Cleanup Method1: EPA 3665A
Cleanup Date1: 03/08/12
Cleanup Method2: EPA 3660B
Cleanup Date2: 03/08/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	75.1	--	2
Aroclor 1221	ND		ug/kg	75.1	--	2
Aroclor 1232	ND		ug/kg	75.1	--	2
Aroclor 1242	ND		ug/kg	75.1	--	2
Aroclor 1248	ND		ug/kg	75.1	--	2
Aroclor 1254	ND		ug/kg	75.1	--	2
Aroclor 1260	ND		ug/kg	75.1	--	2
Aroclor 1262	ND		ug/kg	75.1	--	2
Aroclor 1268	ND		ug/kg	75.1	--	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	80		30-150
Decachlorobiphenyl	82		30-150
2,4,5,6-Tetrachloro-m-xylene	77		30-150
Decachlorobiphenyl	193	Q	30-150

Project Name: FMR. ENERGY INT. PARCEL**Lab Number:** L1203632**Project Number:** 06318-520**Report Date:** 03/08/12**SAMPLE RESULTS**

Lab ID: L1203632-03
Client ID: HA-204 S3
Sample Location: 495 TECH CTR
Matrix: Soil
Analytical Method: 97,8082
Analytical Date: 03/05/12 14:21
Analyst: KB
Percent Solids: 78%

Date Collected: 03/02/12 10:35
Date Received: 03/02/12
Field Prep: Not Specified
Extraction Method: EPA 3540C
Extraction Date: 03/03/12 01:35
Cleanup Method1: EPA 3665A
Cleanup Date1: 03/05/12
Cleanup Method2: EPA 3660B
Cleanup Date2: 03/05/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	42.0	--	1
Aroclor 1221	ND		ug/kg	42.0	--	1
Aroclor 1232	ND		ug/kg	42.0	--	1
Aroclor 1242	ND		ug/kg	42.0	--	1
Aroclor 1248	ND		ug/kg	42.0	--	1
Aroclor 1254	ND		ug/kg	42.0	--	1
Aroclor 1260	ND		ug/kg	42.0	--	1
Aroclor 1262	ND		ug/kg	42.0	--	1
Aroclor 1268	ND		ug/kg	42.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	61		30-150
Decachlorobiphenyl	64		30-150
2,4,5,6-Tetrachloro-m-xylene	59		30-150
Decachlorobiphenyl	77		30-150

Project Name: FMR. ENERGY INT. PARCEL**Lab Number:** L1203632**Project Number:** 06318-520**Report Date:** 03/08/12**SAMPLE RESULTS**

Lab ID: L1203632-06 **D**
Client ID: HA-205 S1
Sample Location: 495 TECH CTR
Matrix: Soil
Analytical Method: 97,8082
Analytical Date: 03/07/12 20:19
Analyst: KB
Percent Solids: 92%

Date Collected: 03/02/12 10:55
Date Received: 03/02/12
Field Prep: Not Specified
Extraction Method: EPA 3540C
Extraction Date: 03/03/12 01:35
Cleanup Method1: EPA 3665A
Cleanup Date1: 03/05/12
Cleanup Method2: EPA 3660B
Cleanup Date2: 03/05/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	692	--	20
Aroclor 1221	ND		ug/kg	692	--	20
Aroclor 1232	ND		ug/kg	692	--	20
Aroclor 1242	ND		ug/kg	692	--	20
Aroclor 1254	9840		ug/kg	692	--	20
Aroclor 1262	ND		ug/kg	692	--	20
Aroclor 1268	ND		ug/kg	692	--	20

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150
Decachlorobiphenyl	0	Q	30-150
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150
Decachlorobiphenyl	0	Q	30-150

Project Name: FMR. ENERGY INT. PARCEL**Lab Number:** L1203632**Project Number:** 06318-520**Report Date:** 03/08/12**SAMPLE RESULTS**

Lab ID: L1203632-06 **D**
Client ID: HA-205 S1
Sample Location: 495 TECH CTR
Matrix: Soil
Analytical Method: 97,8082
Analytical Date: 03/07/12 20:19
Analyst: KB
Percent Solids: 92%

Date Collected: 03/02/12 10:55
Date Received: 03/02/12
Field Prep: Not Specified
Extraction Method: EPA 3540C
Extraction Date: 03/03/12 01:35
Cleanup Method1: EPA 3665A
Cleanup Date1: 03/05/12
Cleanup Method2: EPA 3660B
Cleanup Date2: 03/05/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1248	4600		ug/kg	692	--	20
Aroclor 1260	2110		ug/kg	692	--	20

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150
Decachlorobiphenyl	0	Q	30-150
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150
Decachlorobiphenyl	0	Q	30-150

Project Name: FMR. ENERGY INT. PARCEL**Lab Number:** L1203632**Project Number:** 06318-520**Report Date:** 03/08/12**SAMPLE RESULTS**

Lab ID: L1203632-07
Client ID: HA-205 S2
Sample Location: 495 TECH CTR
Matrix: Soil
Analytical Method: 97,8082
Analytical Date: 03/05/12 14:45
Analyst: KB
Percent Solids: 90%

Date Collected: 03/02/12 11:05
Date Received: 03/02/12
Field Prep: Not Specified
Extraction Method: EPA 3540C
Extraction Date: 03/03/12 01:35
Cleanup Method1: EPA 3665A
Cleanup Date1: 03/05/12
Cleanup Method2: EPA 3660B
Cleanup Date2: 03/05/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	36.0	--	1
Aroclor 1221	ND		ug/kg	36.0	--	1
Aroclor 1232	ND		ug/kg	36.0	--	1
Aroclor 1242	ND		ug/kg	36.0	--	1
Aroclor 1248	ND		ug/kg	36.0	--	1
Aroclor 1254	80.0		ug/kg	36.0	--	1
Aroclor 1260	ND		ug/kg	36.0	--	1
Aroclor 1262	ND		ug/kg	36.0	--	1
Aroclor 1268	ND		ug/kg	36.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	69		30-150
Decachlorobiphenyl	74		30-150
2,4,5,6-Tetrachloro-m-xylene	69		30-150
Decachlorobiphenyl	92		30-150

Project Name: FMR. ENERGY INT. PARCEL**Lab Number:** L1203632**Project Number:** 06318-520**Report Date:** 03/08/12**SAMPLE RESULTS**

Lab ID: L1203632-08
Client ID: HA-205 S3
Sample Location: 495 TECH CTR
Matrix: Soil
Analytical Method: 97,8082
Analytical Date: 03/05/12 14:58
Analyst: KB
Percent Solids: 87%

Date Collected: 03/02/12 11:10
Date Received: 03/02/12
Field Prep: Not Specified
Extraction Method: EPA 3540C
Extraction Date: 03/03/12 01:35
Cleanup Method1: EPA 3665A
Cleanup Date1: 03/05/12
Cleanup Method2: EPA 3660B
Cleanup Date2: 03/05/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	37.8	--	1
Aroclor 1221	ND		ug/kg	37.8	--	1
Aroclor 1232	ND		ug/kg	37.8	--	1
Aroclor 1242	ND		ug/kg	37.8	--	1
Aroclor 1248	ND		ug/kg	37.8	--	1
Aroclor 1254	ND		ug/kg	37.8	--	1
Aroclor 1260	ND		ug/kg	37.8	--	1
Aroclor 1262	ND		ug/kg	37.8	--	1
Aroclor 1268	ND		ug/kg	37.8	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	34		30-150
Decachlorobiphenyl	35		30-150
2,4,5,6-Tetrachloro-m-xylene	34		30-150
Decachlorobiphenyl	39		30-150

Project Name: FMR. ENERGY INT. PARCEL**Lab Number:** L1203632**Project Number:** 06318-520**Report Date:** 03/08/12

Method Blank Analysis Batch Quality Control

Analytical Method: 97,8082
 Analytical Date: 03/05/12 16:12
 Analyst: KB

Extraction Method: EPA 3540C
 Extraction Date: 03/03/12 01:35
 Cleanup Method1: EPA 3665A
 Cleanup Date1: 03/05/12
 Cleanup Method2: EPA 3660B
 Cleanup Date2: 03/05/12

Parameter	Result	Qualifier	Units	RL	MDL
MCP Polychlorinated Biphenyls - Westborough Lab for sample(s): 01,03,06-08 Batch: WG521226-1					
Aroclor 1016	ND		ug/kg	31.5	--
Aroclor 1221	ND		ug/kg	31.5	--
Aroclor 1232	ND		ug/kg	31.5	--
Aroclor 1242	ND		ug/kg	31.5	--
Aroclor 1248	ND		ug/kg	31.5	--
Aroclor 1254	ND		ug/kg	31.5	--
Aroclor 1260	ND		ug/kg	31.5	--
Aroclor 1262	ND		ug/kg	31.5	--
Aroclor 1268	ND		ug/kg	31.5	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	66		30-150
Decachlorobiphenyl	74		30-150
2,4,5,6-Tetrachloro-m-xylene	68		30-150
Decachlorobiphenyl	82		30-150

Project Name: FMR. ENERGY INT. PARCEL**Lab Number:** L1203632**Project Number:** 06318-520**Report Date:** 03/08/12

Method Blank Analysis Batch Quality Control

Analytical Method: 97,8082
 Analytical Date: 03/08/12 12:34
 Analyst: KB

Extraction Method: EPA 3540C
 Extraction Date: 03/07/12 15:50
 Cleanup Method1: EPA 3665A
 Cleanup Date1: 03/08/12
 Cleanup Method2: EPA 3660B
 Cleanup Date2: 03/08/12

Parameter	Result	Qualifier	Units	RL	MDL
MCP Polychlorinated Biphenyls - Westborough Lab for sample(s): 02 Batch: WG521901-1					
Aroclor 1016	ND		ug/kg	32.6	--
Aroclor 1221	ND		ug/kg	32.6	--
Aroclor 1232	ND		ug/kg	32.6	--
Aroclor 1242	ND		ug/kg	32.6	--
Aroclor 1248	ND		ug/kg	32.6	--
Aroclor 1254	ND		ug/kg	32.6	--
Aroclor 1260	ND		ug/kg	32.6	--
Aroclor 1262	ND		ug/kg	32.6	--
Aroclor 1268	ND		ug/kg	32.6	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	81		30-150
Decachlorobiphenyl	89		30-150
2,4,5,6-Tetrachloro-m-xylene	77		30-150
Decachlorobiphenyl	108		30-150

Lab Control Sample Analysis

Batch Quality Control

Project Name: FMR. ENERGY INT. PARCEL

Lab Number: L1203632

Project Number: 06318-520

Report Date: 03/08/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Polychlorinated Biphenyls - Westborough Lab Associated sample(s): 01,03,06-08 Batch: WG521226-2 WG521226-3								
Aroclor 1016	49		57		40-140	15		30
Aroclor 1260	50		55		40-140	10		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	69		77		30-150
Decachlorobiphenyl	70		71		30-150
2,4,5,6-Tetrachloro-m-xylene	70		73		30-150
Decachlorobiphenyl	79		78		30-150

MCP Polychlorinated Biphenyls - Westborough Lab Associated sample(s): 02 Batch: WG521901-2 WG521901-3								
Aroclor 1016	82		84		40-140	2		30
Aroclor 1260	89		94		40-140	5		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	80		76		30-150
Decachlorobiphenyl	87		85		30-150
2,4,5,6-Tetrachloro-m-xylene	75		71		30-150
Decachlorobiphenyl	93		87		30-150

INORGANICS & MISCELLANEOUS

Project Name: FMR. ENERGY INT. PARCEL**Project Number:** 06318-520**Lab Number:** L1203632**Report Date:** 03/08/12**SAMPLE RESULTS****Lab ID:** L1203632-01**Client ID:** HA-204 S1**Sample Location:** 495 TECH CTR**Matrix:** Soil**Date Collected:** 03/02/12 10:25**Date Received:** 03/02/12**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	90		%	0.10	NA	1	-	03/06/12 13:30	30,2540G	SD



Project Name: FMR. ENERGY INT. PARCEL**Project Number:** 06318-520**Lab Number:** L1203632**Report Date:** 03/08/12**SAMPLE RESULTS****Lab ID:** L1203632-02**Client ID:** HA-204 S2**Sample Location:** 495 TECH CTR**Matrix:** Soil**Date Collected:** 03/02/12 10:30**Date Received:** 03/02/12**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	87		%	0.10	NA	1	-	03/06/12 13:30	30,2540G	SD



Project Name: FMR. ENERGY INT. PARCEL**Project Number:** 06318-520**Lab Number:** L1203632**Report Date:** 03/08/12**SAMPLE RESULTS****Lab ID:** L1203632-03**Client ID:** HA-204 S3**Sample Location:** 495 TECH CTR**Matrix:** Soil**Date Collected:** 03/02/12 10:35**Date Received:** 03/02/12**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	78		%	0.10	NA	1	-	03/06/12 13:30	30,2540G	SD



Project Name: FMR. ENERGY INT. PARCEL**Project Number:** 06318-520**Lab Number:** L1203632**Report Date:** 03/08/12**SAMPLE RESULTS****Lab ID:** L1203632-06**Client ID:** HA-205 S1**Sample Location:** 495 TECH CTR**Matrix:** Soil**Date Collected:** 03/02/12 10:55**Date Received:** 03/02/12**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	92		%	0.10	NA	1	-	03/06/12 13:30	30,2540G	SD



Project Name: FMR. ENERGY INT. PARCEL**Project Number:** 06318-520**Lab Number:** L1203632**Report Date:** 03/08/12**SAMPLE RESULTS****Lab ID:** L1203632-07**Client ID:** HA-205 S2**Sample Location:** 495 TECH CTR**Matrix:** Soil**Date Collected:** 03/02/12 11:05**Date Received:** 03/02/12**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	90		%	0.10	NA	1	-	03/06/12 13:30	30,2540G	SD



Project Name: FMR. ENERGY INT. PARCEL**Project Number:** 06318-520**Lab Number:** L1203632**Report Date:** 03/08/12**SAMPLE RESULTS****Lab ID:** L1203632-08**Client ID:** HA-205 S3**Sample Location:** 495 TECH CTR**Matrix:** Soil**Date Collected:** 03/02/12 11:10**Date Received:** 03/02/12**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	87		%	0.10	NA	1	-	03/06/12 13:30	30,2540G	SD



Project Name: FMR. ENERGY INT. PARCEL**Project Number:** 06318-520**Lab Duplicate Analysis****Batch Quality Control****Lab Number:** L1203632**Report Date:** 03/08/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-03,06-08 QC Batch ID: WG521647-1 QC Sample: L1203630-01 Client ID: DUP Sample						
Solids, Total	94	94	%	0		20

Project Name: FMR. ENERGY INT. PARCEL**Project Number:** 06318-520**Lab Number:** L1203632**Report Date:** 03/08/12**Sample Receipt and Container Information**

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA**Cooler Information Custody Seal****Cooler**

A Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1203632-01A	Amber 120ml unpreserved	A	N/A	2.8	Y	Absent	TS(7),MCP-8082-10-3540C(365)
L1203632-02A	Amber 120ml unpreserved	A	N/A	2.8	Y	Absent	TS(7),MCP-8082-10-3540C(365)
L1203632-03A	Amber 120ml unpreserved	A	N/A	2.8	Y	Absent	TS(7),MCP-8082-10-3540C(365)
L1203632-04A	Amber 120ml unpreserved	A	N/A	2.8	Y	Absent	HOLD(14)
L1203632-05A	Amber 120ml unpreserved	A	N/A	2.8	Y	Absent	HOLD(14)
L1203632-06A	Amber 120ml unpreserved	A	N/A	2.8	Y	Absent	TS(7),MCP-8082-10-3540C(365)
L1203632-07A	Amber 120ml unpreserved	A	N/A	2.8	Y	Absent	TS(7),MCP-8082-10-3540C(365)
L1203632-08A	Amber 120ml unpreserved	A	N/A	2.8	Y	Absent	TS(7),MCP-8082-10-3540C(365)
L1203632-09A	Amber 120ml unpreserved	A	N/A	2.8	Y	Absent	HOLD(14)
L1203632-10A	Amber 120ml unpreserved	A	N/A	2.8	Y	Absent	HOLD(14)

*Values in parentheses indicate holding time in days

Project Name: FMR. ENERGY INT. PARCEL
Project Number: 06318-520

Lab Number: L1203632
Report Date: 03/08/12

GLOSSARY

Acronyms

EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NI	- Not Ignitable.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

- | | |
|-----------|---|
| A | - Spectra identified as "Aldol Condensation Product". |
| B | - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. |
| C | - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses. |
| D | - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte. |
| E | - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument. |
| G | - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated. |
| H | - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection. |
| I | - The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported due to obvious interference. |
| M | - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte. |
| NJ | - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search. |

Report Format: Data Usability Report



Project Name: FMR. ENERGY INT. PARCEL
Project Number: 06318-520

Lab Number: L1203632
Report Date: 03/08/12

Data Qualifiers

- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the reporting limit (RL) for the sample.

Project Name: FMR. ENERGY INT. PARCEL
Project Number: 06318-520

Lab Number: L1203632
Report Date: 03/08/12

REFERENCES

- 30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.
- 97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certificate/Approval Program Summary

Last revised January 30, 2012 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0574. **NELAP Accredited Solid Waste/Soil.**

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP), Ethylene Dibromide (EDB), 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223 P/A), E. Coli. – Colilert (SM9223 P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D))

Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E).)

Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Volatile Organics, Acid Extractables (Phenols), 3,3'-Dichlorobenzidine, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Maine Department of Human Services Certificate/Lab ID: 2009024.

Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 353.2, SM2130B, 2320B, 2540C, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, SM2320B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NH3-H, 4500NO3-F, 4500P-B, 4500P-E, 5210B, 5220D, 5310C, 9010B, 9040B, 9030B, 7470A, 7196A, 2340B, EPA 200.7, 6010, 200.8, 6020, 245.1, 1311, 1312, 3005A, Enterolert, 9223D, 9222D. Organic Parameters: 608, 8081, 8082, 8330, 8151A, 624, 8260, 3510C, 3630C, 5030B, ME-DRO, ME-GRO, MA-EPH, MA-VPH.)

Solid Waste/Soil (Inorganic Parameters: 9010B, 9012A, 9014A, 9040B, 9045C, 6010B, 7471A, 7196A, 9050A, 1010, 1030, 9065, 1311, 1312, 3005A, 3050B. Organic Parameters: ME-DRO, ME-GRO, MA-EPH, MA-VPH, 8260B, 8270C, 8330, 8151A, 8081A, 8082, 3540C, 3546, 3580A, 3630C, 5030B, 5035.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.

Drinking Water (Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl) (EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate); (EPA 353.2 for: Nitrate-N, Nitrite-N); (SM4500NO3-F for: Nitrate-N and Nitrite-N); 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B. Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics); (504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), EPA 332. Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; ColilertQT SM9223B; MF-SM9222D.)

Page 31 of 34
Non-Potable Water (Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn); (EPA 200.7 for: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn); 245.1, SM4500H,B, EPA 120.1,

SM2510B, 2540C, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.

Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics),(608 for: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs-Water), (EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables), 600/4-81-045-PCB-Oil. Microbiology Parameters: (ColilertQT SM9223B;Enterolert-QT: SM9222D-MF.)

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. *NELAP Accredited.*

Drinking Water (Inorganic Parameters: SM 9222B, 9223B, 9215B, EPA 200.7, 200.8, 245.2, 300.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 332.0. Organic Parameters: 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 3005A, 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 350.2, 351.1, 353.2, 410.4, 420.1, 1664A, SW-846 9010, 9030, 9040B, SM426C, SM2120B, 2310B, 2320B, 2540B, 2540D, 4500H+B, 4500CL-E, 4500CN-E, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 5220D, 2510B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3510C, 3630C, 5030B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A, 8151A.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040B, 9045C, 9050C, 9065,1311, 1312, 3005A, 3050B. Organic Parameters: SW-846 3540C, 3546, 3550B, 3580A, 3630C, 5030B, 5035, 8260B, 8270C, 8330, 8151A, 8015B, 8082, 8081A.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. *NELAP Accredited.*

Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500CN-CE, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 200.8, 245.2, 2540C, SM2120B, 2320B, 2510B, 5310C, SM4500H-B. Organic Parameters: EPA 332, 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500CI-E, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM510ABC, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, 9222D, 9221B, 9221C, 9221E, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, 350.2, SW-846 1312, 6020, 6020A, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, 4500CN-CE, EPA 245.1, 245.2, SW-846 9040B, 3005A, 3015, EPA 6010B, 6010C, 7196A, 3060A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3510C, EPA 608, 624, 625, SW-846 3630C, 5030B, 8081A, 8081B, 8082, 8082A, 8151A, 8330, NJ OQA-QAM-025 Rev.7, NJ EPH.)

Solid & Chemical Materials (Inorganic Parameters: SW-846, 6010B, 6010C, 7196A, 3060A, 9010B, 9030B, 1010, 1030, 1311, 1312, 3005A, 3050B, 7471A, 7471B, 9014, 9012A, 9040B, 9045C, 9050A, 9065. Organic Parameters: SW-846 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3540C, 3545, 3546, 3550B, 3580A, 3630C, 5030B, 5035L, 5035H, NJ OQA-QAM-025 Rev.7, NJ EPH.)

New York Department of Health Certificate/Lab ID: 11148. *NELAP Accredited.*

Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500H-B, 4500NO3-F, 2540C, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, 5310C, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, SM4500CL-E, 4500F-C, SM15 426C, EPA 350.1, SM4500NH3-BH, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-04-1-C, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, LACHAT 10-204-00-1-A, EPA 9040B, SM4500-HB, EPA 1664A, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 9010B, 9030B.. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, EPA 3510C, 5030B.)

Solid & Hazardous Waste (Inorganic Parameters: 1010, 1030, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8015B, 8081A, 8151A, 8330, 8082, 3540C, 3545, 3546, 3580, 5030B, 5035.)

North Carolina Department of the Environment and Natural Resources Certificate/Lab ID : 666. Organic Parameters: MA-EPH, MA-VPH.

Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-03671. **NELAP Accredited.**
Drinking Water (Organic Parameters: EPA 524.2, 504.1)

Non-Potable Water (Inorganic Parameters: EPA 1312, 200.7, 410.4, 1664A, SM2540D, 5210B, 5220D, 4500-P, BE. Organic Parameters: EPA 3510C, 3005A, 3630C, 5030B, 625, 624, 608, 8081A, 8081B, 8082, 802A, 8151A, 8260B, 8270C, 8270D, 8330)

Solid & Hazardous Waste (Inorganic Parameters: EPA 350.1, 1010, 1030, 1311, 1312, 3050B, 3060A, 6010B, 6010C, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065, SM 4500NH₃-H. Organic Parameters: 3540C, 3546, 3580A, 3630C, 5035, 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8260B, 8270C, 8270D, 8330)

Rhode Island Department of Health Certificate/Lab ID: LAO00065. **NELAP Accredited via NY-DOH.**

Refer to MA-DEP Certificate for Potable and Non-Potable Water.

Refer to NJ-DEP Certificate for Potable and Non-Potable Water.

Texas Commission on Environmental Quality Certificate/Lab ID: T104704476-09-1. **NELAP Accredited.**

Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH₃-H, 4500NO₂B, 4500P-E, 4500 S²⁻ D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Virginia Division of Consolidated Laboratory Services Certificate/Lab ID: 460195. **NELAP Accredited.**

Non-Potable Water (Inorganic Parameters: EPA 3005A, 3015, 1312, 6010B, 6010C, SM4500S-D, SM4500-CN-CE, Lachat 10-204-00-1-X. Organic Parameters: EPA 8260B)

Solid & Hazardous Waste (Inorganic Parameters: EPA 3050B, 1311, 1312, 6010B, 6010C, 9030B, 9010B, 9012A, 9014. Organic Parameters: EPA 5035, 5030B, 8260B.)

Department of Defense, L-A-B Certificate/Lab ID: L2217.

Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6020, 245.1, 245.2, 7470A, 9040B, 300.0, 332.0, 6860, 353.2, 410.4, 9060, 1664A, SM 4500CN-E, 4500H-B, 4500NO₃-F, 5220D, 5310C, 2320B, 2540C, 3005A, 3015, 9010B, 9056. Organic Parameters: EPA 8260B, 8270C, 8330A, 625, 8082, 8081A, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 7471A, 9010, 9012A, 6860, 1311, 1312, 3050B, 7196A, 9010B, 3500-CR-D, 4500CN-CE, 2540G, Organic Parameters: EPA 8260B, 8270C, 8330A/B-prep, 8082, 8081A, 3540C, 3546, 3580A, 5035A, MassDEP EPH, MassDEP VPH.)

The following analytes are not included in our current NELAP/TNI Scope of Accreditation:

EPA 8260B: Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A**: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C**: Methyl naphthalene, Dimethyl naphthalene, Total Methylnaphthalenes, Total Dimethylnaphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625**: 4-Chloroaniline, 4-Methylphenol. Total Phosphorus in a soil matrix, Chloride in a soil matrix, TKN in a soil matrix, NO₂ in a soil matrix, NO₃ in a soil matrix, SO₄ in a soil matrix.

CHAIN OF CUSTODY RECORD

ALPHA Job # E 1203 632

H&A FILE NO. 06318-5720
PROJECT NAME Enviro Int. Parcel
H&A CONTACT C. Worth

LABORATORY Accutest
ADDRESS 495 Tech Ctr
CONTACT
DELIVERY DATE 3/2/12
TURNAROUND TIME STP
PROJECT MANAGER C. Worth

Phone (617) 886-7400
Fax (617) 886-7600
Page 1 of 1

Sample No.	Date	Time	Depth	Type	Analysis Requested										Number of Containers	Comments (special instructions, precautions, additional method numbers, etc.)			
					VOA	ABNs PAH only	MCP Metals	Pesticides PCBs	VPH Full Suite C-ranges only	EPH Full Suite C-ranges only	TPH (specify)	TCLP (specify)	Reactivity Ignitability Corrosivity						
HA-204 S1	3/2/12	1025	0-0.5	Soil															
HA-204 S2		1030	1-2																
HA-204 S3		1035	2-3																
HA-204 S4		1040	3-5																
HA-204 S5		1045	5-7																
HA-205 S1		1055	0-0.5																
HA-205 S2		1105	1-2																
HA-205 S3		1110	2-3																
HA-205 S4		1115	3-5																
HA-205 S5		1120	5-7																

LIQUID										SOLID										
Sign	Print	Received by	Date	Time	Sign	Print	Received by	Date	Time	Sign	Print	Received by	Date	Time	Sign	Print	Received by	Date	Time	
David M. Pallares	David M. Pallares	Michael A. Augst	3/2/12	15:15	Michael A. Augst	Michael A. Augst	3/2/12	15:15		Michael A. Augst	Michael A. Augst	3/2/12	15:15		Michael A. Augst	Michael A. Augst	3/2/12	15:15		

PRESERVATION KEY									
A	B	C	D	E	F	G	H	I	J
Sample chilled	Sample filtered	NaOH	HNO ₃	H ₂ SO ₄	HCL	Methanol	Water/NaHSO ₄ (circle)		

Required Reporting Limits and Data Quality Objectives
<input type="checkbox"/> RC-S1 <input type="checkbox"/> RC-S2 <input type="checkbox"/> RC-GW1 <input type="checkbox"/> RC-GW2 <input type="checkbox"/> RC-GW3



ANALYTICAL REPORT

Lab Number:	L1203636
Client:	Haley & Aldrich, Inc. 465 Medford Street, Suite 2200 Charlestown, MA 02129-1400
ATTN:	Cole Worthy
Phone:	(617) 886-7341
Project Name:	FMR. ENERGY INT PARCEL
Project Number:	06318-520
Report Date:	03/08/12

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), USDA (Permit #P-330-11-00240), NC (666), TX (T104704476), DOD (L2217), US Army Corps of Engineers.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: FMR. ENERGY INT PARCEL
Project Number: 06318-520

Lab Number: L1203636
Report Date: 03/08/12

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1203636-01	HA-206 S1	495 TECH CTR	03/02/12 11:28
L1203636-02	HA-206 S2	495 TECH CTR	03/02/12 11:32
L1203636-03	HA-206 S3	495 TECH CTR	03/02/12 11:40
L1203636-04	HA-206 S4	495 TECH CTR	03/02/12 11:45
L1203636-05	HA-206 S5	495 TECH CTR	03/02/12 11:50
L1203636-06	HA-207 S1	495 TECH CTR	03/02/12 11:55
L1203636-07	HA-207 S2	495 TECH CTR	03/02/12 12:00
L1203636-08	HA-207 S3	495 TECH CTR	03/02/12 12:10
L1203636-09	HA-207 S4	495 TECH CTR	03/02/12 12:20
L1203636-10	HA-207 S5	495 TECH CTR	03/02/12 12:30

Project Name: FMR. ENERGY INT PARCEL

Lab Number: L1203636

Project Number: 06318-520

Report Date: 03/08/12

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES
A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	NO
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	NO
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	YES
For any questions answered "No", please refer to the case narrative section on the following page(s).		

Please note that sample matrix information is located in the Sample Results section of this report.



Project Name: FMR. ENERGY INT PARCEL
Project Number: 06318-520

Lab Number: L1203636
Report Date: 03/08/12

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

Please contact Client Services at 800-624-9220 with any questions.

MCP Related Narratives

PCBs

L1203636-01 has elevated detection limits due to the dilution required by matrix interferences encountered during the concentration of the sample.

L1203636-06 has elevated detection limits due to the dilution required by the matrix interferences encountered during the concentration of the sample and the analytical dilution required by the target compounds present in the sample.

In reference to question G:

L1203636-06: One or more of the target analytes did not achieve the requested CAM reporting limits.

Project Name: FMR. ENERGY INT PARCEL
Project Number: 06318-520

Lab Number: L1203636
Report Date: 03/08/12

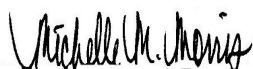
Case Narrative (continued)

In reference to question H:

The surrogate recoveries for L1203636-06 are below the acceptance criteria for 2,4,5,6-Tetrachloro-m-xylene and Decachlorobiphenyl (all at 0%) due to the dilution required to quantitate the sample. Re-extraction was not required; therefore, the results of the original analysis are reported.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:



Michelle M. Morris

Title: Technical Director/Representative

Date: 03/08/12

ORGANICS

PCBS

Project Name: FMR. ENERGY INT PARCEL**Lab Number:** L1203636**Project Number:** 06318-520**Report Date:** 03/08/12**SAMPLE RESULTS**

Lab ID: L1203636-01
Client ID: HA-206 S1
Sample Location: 495 TECH CTR
Matrix: Soil
Analytical Method: 97,8082
Analytical Date: 03/05/12 15:10
Analyst: KB
Percent Solids: 84%

Date Collected: 03/02/12 11:28
Date Received: 03/02/12
Field Prep: Not Specified
Extraction Method: EPA 3540C
Extraction Date: 03/03/12 01:35
Cleanup Method1: EPA 3665A
Cleanup Date1: 03/05/12
Cleanup Method2: EPA 3660B
Cleanup Date2: 03/05/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	77.2	--	2
Aroclor 1221	ND		ug/kg	77.2	--	2
Aroclor 1232	ND		ug/kg	77.2	--	2
Aroclor 1242	ND		ug/kg	77.2	--	2
Aroclor 1248	ND		ug/kg	77.2	--	2
Aroclor 1262	ND		ug/kg	77.2	--	2
Aroclor 1268	ND		ug/kg	77.2	--	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	57		30-150
Decachlorobiphenyl	59		30-150
2,4,5,6-Tetrachloro-m-xylene	50		30-150
Decachlorobiphenyl	63		30-150

Project Name: FMR. ENERGY INT PARCEL**Lab Number:** L1203636**Project Number:** 06318-520**Report Date:** 03/08/12**SAMPLE RESULTS**

Lab ID: L1203636-01
Client ID: HA-206 S1
Sample Location: 495 TECH CTR
Matrix: Soil
Analytical Method: 97,8082
Analytical Date: 03/05/12 15:10
Analyst: KB
Percent Solids: 84%

Date Collected: 03/02/12 11:28
Date Received: 03/02/12
Field Prep: Not Specified
Extraction Method: EPA 3540C
Extraction Date: 03/03/12 01:35
Cleanup Method1: EPA 3665A
Cleanup Date1: 03/05/12
Cleanup Method2: EPA 3660B
Cleanup Date2: 03/05/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1254	1030		ug/kg	77.2	--	2
Aroclor 1260	865		ug/kg	77.2	--	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	57		30-150
Decachlorobiphenyl	59		30-150
2,4,5,6-Tetrachloro-m-xylene	50		30-150
Decachlorobiphenyl	63		30-150

Project Name: FMR. ENERGY INT PARCEL**Lab Number:** L1203636**Project Number:** 06318-520**Report Date:** 03/08/12**SAMPLE RESULTS**

Lab ID: L1203636-02
Client ID: HA-206 S2
Sample Location: 495 TECH CTR
Matrix: Soil
Analytical Method: 97,8082
Analytical Date: 03/05/12 15:22
Analyst: KB
Percent Solids: 83%

Date Collected: 03/02/12 11:32
Date Received: 03/02/12
Field Prep: Not Specified
Extraction Method: EPA 3540C
Extraction Date: 03/03/12 01:35
Cleanup Method1: EPA 3665A
Cleanup Date1: 03/05/12
Cleanup Method2: EPA 3660B
Cleanup Date2: 03/05/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	38.7	--	1
Aroclor 1221	ND		ug/kg	38.7	--	1
Aroclor 1232	ND		ug/kg	38.7	--	1
Aroclor 1242	ND		ug/kg	38.7	--	1
Aroclor 1248	ND		ug/kg	38.7	--	1
Aroclor 1254	ND		ug/kg	38.7	--	1
Aroclor 1260	ND		ug/kg	38.7	--	1
Aroclor 1262	ND		ug/kg	38.7	--	1
Aroclor 1268	ND		ug/kg	38.7	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	75		30-150
Decachlorobiphenyl	76		30-150
2,4,5,6-Tetrachloro-m-xylene	71		30-150
Decachlorobiphenyl	92		30-150

Project Name: FMR. ENERGY INT PARCEL**Lab Number:** L1203636**Project Number:** 06318-520**Report Date:** 03/08/12**SAMPLE RESULTS**

Lab ID: L1203636-03
Client ID: HA-206 S3
Sample Location: 495 TECH CTR
Matrix: Soil
Analytical Method: 97,8082
Analytical Date: 03/05/12 15:35
Analyst: KB
Percent Solids: 87%

Date Collected: 03/02/12 11:40
Date Received: 03/02/12
Field Prep: Not Specified
Extraction Method: EPA 3540C
Extraction Date: 03/03/12 01:35
Cleanup Method1: EPA 3665A
Cleanup Date1: 03/05/12
Cleanup Method2: EPA 3660B
Cleanup Date2: 03/05/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	37.0	--	1
Aroclor 1221	ND		ug/kg	37.0	--	1
Aroclor 1232	ND		ug/kg	37.0	--	1
Aroclor 1242	ND		ug/kg	37.0	--	1
Aroclor 1248	ND		ug/kg	37.0	--	1
Aroclor 1254	ND		ug/kg	37.0	--	1
Aroclor 1260	ND		ug/kg	37.0	--	1
Aroclor 1262	ND		ug/kg	37.0	--	1
Aroclor 1268	ND		ug/kg	37.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	63		30-150
Decachlorobiphenyl	68		30-150
2,4,5,6-Tetrachloro-m-xylene	62		30-150
Decachlorobiphenyl	71		30-150

Project Name: FMR. ENERGY INT PARCEL**Lab Number:** L1203636**Project Number:** 06318-520**Report Date:** 03/08/12**SAMPLE RESULTS**

Lab ID: L1203636-06 **D**
Client ID: HA-207 S1
Sample Location: 495 TECH CTR
Matrix: Soil
Analytical Method: 97,8082
Analytical Date: 03/07/12 20:32
Analyst: KB
Percent Solids: 96%

Date Collected: 03/02/12 11:55
Date Received: 03/02/12
Field Prep: Not Specified
Extraction Method: EPA 3540C
Extraction Date: 03/03/12 01:35
Cleanup Method1: EPA 3665A
Cleanup Date1: 03/05/12
Cleanup Method2: EPA 3660B
Cleanup Date2: 03/05/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	338	--	10
Aroclor 1221	ND		ug/kg	338	--	10
Aroclor 1232	ND		ug/kg	338	--	10
Aroclor 1242	ND		ug/kg	338	--	10
Aroclor 1248	797		ug/kg	338	--	10
Aroclor 1262	ND		ug/kg	338	--	10
Aroclor 1268	ND		ug/kg	338	--	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150
Decachlorobiphenyl	0	Q	30-150
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150
Decachlorobiphenyl	0	Q	30-150

Project Name: FMR. ENERGY INT PARCEL**Lab Number:** L1203636**Project Number:** 06318-520**Report Date:** 03/08/12**SAMPLE RESULTS**

Lab ID: L1203636-06 **D**
Client ID: HA-207 S1
Sample Location: 495 TECH CTR
Matrix: Soil
Analytical Method: 97,8082
Analytical Date: 03/07/12 20:32
Analyst: KB
Percent Solids: 96%

Date Collected: 03/02/12 11:55
Date Received: 03/02/12
Field Prep: Not Specified
Extraction Method: EPA 3540C
Extraction Date: 03/03/12 01:35
Cleanup Method1: EPA 3665A
Cleanup Date1: 03/05/12
Cleanup Method2: EPA 3660B
Cleanup Date2: 03/05/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1254	1740		ug/kg	338	--	10
Aroclor 1260	571		ug/kg	338	--	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150
Decachlorobiphenyl	0	Q	30-150
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150
Decachlorobiphenyl	0	Q	30-150

Project Name: FMR. ENERGY INT PARCEL**Lab Number:** L1203636**Project Number:** 06318-520**Report Date:** 03/08/12**SAMPLE RESULTS**

Lab ID: L1203636-07
Client ID: HA-207 S2
Sample Location: 495 TECH CTR
Matrix: Soil
Analytical Method: 97,8082
Analytical Date: 03/05/12 15:59
Analyst: KB
Percent Solids: 77%

Date Collected: 03/02/12 12:00
Date Received: 03/02/12
Field Prep: Not Specified
Extraction Method: EPA 3540C
Extraction Date: 03/03/12 01:35
Cleanup Method1: EPA 3665A
Cleanup Date1: 03/05/12
Cleanup Method2: EPA 3660B
Cleanup Date2: 03/05/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	42.2	--	1
Aroclor 1221	ND		ug/kg	42.2	--	1
Aroclor 1232	ND		ug/kg	42.2	--	1
Aroclor 1242	ND		ug/kg	42.2	--	1
Aroclor 1248	ND		ug/kg	42.2	--	1
Aroclor 1254	ND		ug/kg	42.2	--	1
Aroclor 1260	ND		ug/kg	42.2	--	1
Aroclor 1262	ND		ug/kg	42.2	--	1
Aroclor 1268	ND		ug/kg	42.2	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	63		30-150
Decachlorobiphenyl	70		30-150
2,4,5,6-Tetrachloro-m-xylene	63		30-150
Decachlorobiphenyl	77		30-150

Project Name: FMR. ENERGY INT PARCEL**Lab Number:** L1203636**Project Number:** 06318-520**Report Date:** 03/08/12**SAMPLE RESULTS**

Lab ID: L1203636-08
Client ID: HA-207 S3
Sample Location: 495 TECH CTR
Matrix: Soil
Analytical Method: 97,8082
Analytical Date: 03/05/12 17:01
Analyst: KB
Percent Solids: 75%

Date Collected: 03/02/12 12:10
Date Received: 03/02/12
Field Prep: Not Specified
Extraction Method: EPA 3540C
Extraction Date: 03/03/12 01:35
Cleanup Method1: EPA 3665A
Cleanup Date1: 03/05/12
Cleanup Method2: EPA 3660B
Cleanup Date2: 03/05/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	43.6	--	1
Aroclor 1221	ND		ug/kg	43.6	--	1
Aroclor 1232	ND		ug/kg	43.6	--	1
Aroclor 1242	ND		ug/kg	43.6	--	1
Aroclor 1248	ND		ug/kg	43.6	--	1
Aroclor 1254	ND		ug/kg	43.6	--	1
Aroclor 1260	ND		ug/kg	43.6	--	1
Aroclor 1262	ND		ug/kg	43.6	--	1
Aroclor 1268	ND		ug/kg	43.6	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	76		30-150
Decachlorobiphenyl	78		30-150
2,4,5,6-Tetrachloro-m-xylene	73		30-150
Decachlorobiphenyl	92		30-150

Project Name: FMR. ENERGY INT PARCEL**Lab Number:** L1203636**Project Number:** 06318-520**Report Date:** 03/08/12

Method Blank Analysis Batch Quality Control

Analytical Method: 97,8082
 Analytical Date: 03/05/12 16:12
 Analyst: KB

Extraction Method: EPA 3540C
 Extraction Date: 03/03/12 01:35
 Cleanup Method1: EPA 3665A
 Cleanup Date1: 03/05/12
 Cleanup Method2: EPA 3660B
 Cleanup Date2: 03/05/12

Parameter	Result	Qualifier	Units	RL	MDL
MCP Polychlorinated Biphenyls - Westborough Lab for sample(s): 01-03,06-08 Batch: WG521226-1					
Aroclor 1016	ND		ug/kg	31.5	--
Aroclor 1221	ND		ug/kg	31.5	--
Aroclor 1232	ND		ug/kg	31.5	--
Aroclor 1242	ND		ug/kg	31.5	--
Aroclor 1248	ND		ug/kg	31.5	--
Aroclor 1254	ND		ug/kg	31.5	--
Aroclor 1260	ND		ug/kg	31.5	--
Aroclor 1262	ND		ug/kg	31.5	--
Aroclor 1268	ND		ug/kg	31.5	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	66		30-150
Decachlorobiphenyl	74		30-150
2,4,5,6-Tetrachloro-m-xylene	68		30-150
Decachlorobiphenyl	82		30-150

Lab Control Sample Analysis**Batch Quality Control****Project Name:** FMR. ENERGY INT PARCEL**Lab Number:** L1203636**Project Number:** 06318-520**Report Date:** 03/08/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Polychlorinated Biphenyls - Westborough Lab Associated sample(s): 01-03,06-08 Batch: WG521226-2 WG521226-3								
Aroclor 1016	49		57		40-140	15		30
Aroclor 1260	50		55		40-140	10		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	69		77		30-150
Decachlorobiphenyl	70		71		30-150
2,4,5,6-Tetrachloro-m-xylene	70		73		30-150
Decachlorobiphenyl	79		78		30-150

INORGANICS & MISCELLANEOUS

Project Name: FMR. ENERGY INT PARCEL**Lab Number:** L1203636**Project Number:** 06318-520**Report Date:** 03/08/12**SAMPLE RESULTS****Lab ID:** L1203636-01**Date Collected:** 03/02/12 11:28**Client ID:** HA-206 S1**Date Received:** 03/02/12**Sample Location:** 495 TECH CTR**Field Prep:** Not Specified**Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	84		%	0.10	NA	1	-	03/06/12 13:30	30,2540G	SD



Project Name: FMR. ENERGY INT PARCEL**Lab Number:** L1203636**Project Number:** 06318-520**Report Date:** 03/08/12**SAMPLE RESULTS****Lab ID:** L1203636-02**Date Collected:** 03/02/12 11:32**Client ID:** HA-206 S2**Date Received:** 03/02/12**Sample Location:** 495 TECH CTR**Field Prep:** Not Specified**Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	83		%	0.10	NA	1	-	03/06/12 13:30	30,2540G	SD



Project Name: FMR. ENERGY INT PARCEL**Lab Number:** L1203636**Project Number:** 06318-520**Report Date:** 03/08/12**SAMPLE RESULTS****Lab ID:** L1203636-03**Date Collected:** 03/02/12 11:40**Client ID:** HA-206 S3**Date Received:** 03/02/12**Sample Location:** 495 TECH CTR**Field Prep:** Not Specified**Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	87		%	0.10	NA	1	-	03/06/12 13:30	30,2540G	SD



Project Name: FMR. ENERGY INT PARCEL**Project Number:** 06318-520**Lab Number:** L1203636**Report Date:** 03/08/12**SAMPLE RESULTS****Lab ID:** L1203636-06**Client ID:** HA-207 S1**Sample Location:** 495 TECH CTR**Matrix:** Soil**Date Collected:** 03/02/12 11:55**Date Received:** 03/02/12**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	96		%	0.10	NA	1	-	03/06/12 13:30	30,2540G	SD



Project Name: FMR. ENERGY INT PARCEL**Lab Number:** L1203636**Project Number:** 06318-520**Report Date:** 03/08/12**SAMPLE RESULTS****Lab ID:** L1203636-07**Date Collected:** 03/02/12 12:00**Client ID:** HA-207 S2**Date Received:** 03/02/12**Sample Location:** 495 TECH CTR**Field Prep:** Not Specified**Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	77		%	0.10	NA	1	-	03/06/12 13:30	30,2540G	SD



Project Name: FMR. ENERGY INT PARCEL**Lab Number:** L1203636**Project Number:** 06318-520**Report Date:** 03/08/12**SAMPLE RESULTS****Lab ID:** L1203636-08**Date Collected:** 03/02/12 12:10**Client ID:** HA-207 S3**Date Received:** 03/02/12**Sample Location:** 495 TECH CTR**Field Prep:** Not Specified**Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	75		%	0.10	NA	1	-	03/06/12 13:30	30,2540G	SD



Lab Duplicate Analysis
Batch Quality Control**Project Name:** FMR. ENERGY INT PARCEL**Project Number:** 06318-520**Lab Number:** L1203636**Report Date:** 03/08/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-03,06-08 QC Batch ID: WG521647-1 QC Sample: L1203630-01 Client ID: DUP Sample						
Solids, Total	94	94	%	0		20

Project Name: FMR. ENERGY INT PARCEL**Project Number:** 06318-520**Lab Number:** L1203636**Report Date:** 03/08/12**Sample Receipt and Container Information**

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA**Cooler Information Custody Seal****Cooler**

A Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1203636-01A	Amber 120ml unpreserved	A	N/A	2.8	Y	Absent	TS(7),MCP-8082-10-3540C(365)
L1203636-02A	Amber 120ml unpreserved	A	N/A	2.8	Y	Absent	TS(7),MCP-8082-10-3540C(365)
L1203636-03A	Amber 120ml unpreserved	A	N/A	2.8	Y	Absent	TS(7),MCP-8082-10-3540C(365)
L1203636-04A	Amber 120ml unpreserved	A	N/A	2.8	Y	Absent	HOLD(14)
L1203636-05A	Amber 120ml unpreserved	A	N/A	2.8	Y	Absent	HOLD(14)
L1203636-06A	Amber 120ml unpreserved	A	N/A	2.8	Y	Absent	TS(7),MCP-8082-10-3540C(365)
L1203636-07A	Amber 120ml unpreserved	A	N/A	2.8	Y	Absent	TS(7),MCP-8082-10-3540C(365)
L1203636-08A	Amber 120ml unpreserved	A	N/A	2.8	Y	Absent	TS(7),MCP-8082-10-3540C(365)
L1203636-09A	Amber 120ml unpreserved	A	N/A	2.8	Y	Absent	HOLD(14)
L1203636-10A	Amber 120ml unpreserved	A	N/A	2.8	Y	Absent	HOLD(14)

Container Comments

L1203636-04A

L1203636-05A

L1203636-09A

L1203636-10A

*Values in parentheses indicate holding time in days

Project Name: FMR. ENERGY INT PARCEL
Project Number: 06318-520

Lab Number: L1203636
Report Date: 03/08/12

GLOSSARY

Acronyms

EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NI	- Not Ignitable.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit.
C	- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
D	- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
E	- Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
G	- The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
H	- The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
I	- The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported due to obvious interference.
M	- Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
NJ	- Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

Report Format: Data Usability Report



Project Name: FMR. ENERGY INT PARCEL
Project Number: 06318-520

Lab Number: L1203636
Report Date: 03/08/12

Data Qualifiers

- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report



Project Name: FMR. ENERGY INT PARCEL
Project Number: 06318-520

Lab Number: L1203636
Report Date: 03/08/12

REFERENCES

- 30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.
- 97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certificate/Approval Program Summary

Last revised January 30, 2012 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0574. **NELAP Accredited Solid Waste/Soil.**

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP), Ethylene Dibromide (EDB), 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223 P/A), E. Coli. – Colilert (SM9223 P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D))

Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E).)

Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Volatile Organics, Acid Extractables (Phenols), 3,3'-Dichlorobenzidine, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Maine Department of Human Services Certificate/Lab ID: 2009024.

Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 353.2, SM2130B, 2320B, 2540C, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, SM2320B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NH3-H, 4500NO3-F, 4500P-B, 4500P-E, 5210B, 5220D, 5310C, 9010B, 9040B, 9030B, 7470A, 7196A, 2340B, EPA 200.7, 6010, 200.8, 6020, 245.1, 1311, 1312, 3005A, Enterolert, 9223D, 9222D. Organic Parameters: 608, 8081, 8082, 8330, 8151A, 624, 8260, 3510C, 3630C, 5030B, ME-DRO, ME-GRO, MA-EPH, MA-VPH.)

Solid Waste/Soil (Inorganic Parameters: 9010B, 9012A, 9014A, 9040B, 9045C, 6010B, 7471A, 7196A, 9050A, 1010, 1030, 9065, 1311, 1312, 3005A, 3050B. Organic Parameters: ME-DRO, ME-GRO, MA-EPH, MA-VPH, 8260B, 8270C, 8330, 8151A, 8081A, 8082, 3540C, 3546, 3580A, 3630C, 5030B, 5035.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.

Drinking Water (Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl) (EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate); (EPA 353.2 for: Nitrate-N, Nitrite-N); (SM4500NO3-F for: Nitrate-N and Nitrite-N); 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B. Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics); (504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), EPA 332. Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; ColilertQT SM9223B; MF-SM9222D.)

Page 30 of 33
for: *Non-Potable Water* (Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn); (EPA 200.7 for: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn); 245.1, SM4500H,B, EPA 120.1,

SM2510B, 2540C, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.

Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics),(608 for: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs-Water), (EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables), 600/4-81-045-PCB-Oil. Microbiology Parameters: (ColilertQT SM9223B;Enterolert-QT: SM9222D-MF.)

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. *NELAP Accredited.*

Drinking Water (Inorganic Parameters: SM 9222B, 9223B, 9215B, EPA 200.7, 200.8, 245.2, 300.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 332.0. Organic Parameters: 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 3005A, 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 350.2, 351.1, 353.2, 410.4, 420.1, 1664A, SW-846 9010, 9030, 9040B, SM426C, SM2120B, 2310B, 2320B, 2540B, 2540D, 4500H+B, 4500CL-E, 4500CN-E, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 5220D, 2510B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3510C, 3630C, 5030B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A, 8151A.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040B, 9045C, 9050C, 9065,1311, 1312, 3005A, 3050B. Organic Parameters: SW-846 3540C, 3546, 3550B, 3580A, 3630C, 5030B, 5035, 8260B, 8270C, 8330, 8151A, 8015B, 8082, 8081A.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. *NELAP Accredited.*

Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500CN-CE, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 200.8, 245.2, 2540C, SM2120B, 2320B, 2510B, 5310C, SM4500H-B. Organic Parameters: EPA 332, 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500CI-E, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM510ABC, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, 9222D, 9221B, 9221C, 9221E, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, 350.2, SW-846 1312, 6020, 6020A, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, 4500CN-CE, EPA 245.1, 245.2, SW-846 9040B, 3005A, 3015, EPA 6010B, 6010C, 7196A, 3060A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3510C, EPA 608, 624, 625, SW-846 3630C, 5030B, 8081A, 8081B, 8082, 8082A, 8151A, 8330, NJ OQA-QAM-025 Rev.7, NJ EPH.)

Solid & Chemical Materials (Inorganic Parameters: SW-846, 6010B, 6010C, 7196A, 3060A, 9010B, 9030B, 1010, 1030, 1311, 1312, 3005A, 3050B, 7471A, 7471B, 9014, 9012A, 9040B, 9045C, 9050A, 9065. Organic Parameters: SW-846 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3540C, 3545, 3546, 3550B, 3580A, 3630C, 5030B, 5035L, 5035H, NJ OQA-QAM-025 Rev.7, NJ EPH.)

New York Department of Health Certificate/Lab ID: 11148. *NELAP Accredited.*

Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500H-B, 4500NO3-F, 2540C, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, 5310C, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, SM4500CL-E, 4500F-C, SM15 426C, EPA 350.1, SM4500NH3-BH, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-04-1-C, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, LACHAT 10-204-00-1-A, EPA 9040B, SM4500-HB, EPA 1664A, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 9010B, 9030B.. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, EPA 3510C, 5030B.)

Solid & Hazardous Waste (Inorganic Parameters: 1010, 1030, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8015B, 8081A, 8151A, 8330, 8082, 3540C, 3545, 3546, 3580, 5030B, 5035.)

North Carolina Department of the Environment and Natural Resources Certificate/Lab ID : 666. Organic Parameters: MA-EPH, MA-VPH.

Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-03671. **NELAP Accredited.**
Drinking Water (Organic Parameters: EPA 524.2, 504.1)

Non-Potable Water (Inorganic Parameters: EPA 1312, 200.7, 410.4, 1664A, SM2540D, 5210B, 5220D, 4500-P, BE. Organic Parameters: EPA 3510C, 3005A, 3630C, 5030B, 625, 624, 608, 8081A, 8081B, 8082, 802A, 8151A, 8260B, 8270C, 8270D, 8330)

Solid & Hazardous Waste (Inorganic Parameters: EPA 350.1, 1010, 1030, 1311, 1312, 3050B, 3060A, 6010B, 6010C, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065, SM 4500NH3-H. Organic Parameters: 3540C, 3546, 3580A, 3630C, 5035, 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8260B, 8270C, 8270D, 8330)

Rhode Island Department of Health Certificate/Lab ID: LAO00065. **NELAP Accredited via NY-DOH.**

Refer to MA-DEP Certificate for Potable and Non-Potable Water.

Refer to NJ-DEP Certificate for Potable and Non-Potable Water.

Texas Commission on Environmental Quality Certificate/Lab ID: T104704476-09-1. **NELAP Accredited.**

Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 S²⁻ D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Virginia Division of Consolidated Laboratory Services Certificate/Lab ID: 460195. **NELAP Accredited.**

Non-Potable Water (Inorganic Parameters: EPA 3005A, 3015, 1312, 6010B, 6010C, SM4500S-D, SM4500-CN-CE, Lachat 10-204-00-1-X. Organic Parameters: EPA 8260B)

Solid & Hazardous Waste (Inorganic Parameters: EPA 3050B, 1311, 1312, 6010B, 6010C, 9030B, 9010B, 9012A, 9014. Organic Parameters: EPA 5035, 5030B, 8260B.)

Department of Defense, L-A-B Certificate/Lab ID: L2217.

Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6020, 245.1, 245.2, 7470A, 9040B, 300.0, 332.0, 6860, 353.2, 410.4, 9060, 1664A, SM 4500CN-E, 4500H-B, 4500NO3-F, 5220D, 5310C, 2320B, 2540C, 3005A, 3015, 9010B, 9056. Organic Parameters: EPA 8260B, 8270C, 8330A, 625, 8082, 8081A, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 7471A, 9010, 9012A, 6860, 1311, 1312, 3050B, 7196A, 9010B, 3500-CR-D, 4500CN-CE, 2540G, Organic Parameters: EPA 8260B, 8270C, 8330A/B-prep, 8082, 8081A, 3540C, 3546, 3580A, 5035A, MassDEP EPH, MassDEP VPH.)

The following analytes are not included in our current NELAP/TNI Scope of Accreditation:

EPA 8260B: Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A**: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C**: Methyl naphthalene, Dimethyl naphthalene, Total Methyl naphthalenes, Total Dimethyl naphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625**: 4-Chloroaniline, 4-Methylphenol. Total Phosphorus in a soil matrix, Chloride in a soil matrix, TKN in a soil matrix, NO₂ in a soil matrix, NO₃ in a soil matrix, SO₄ in a soil matrix.

CHAIN OF CUSTODY RECORD

ALPHA Job # 21203656

FAX (617) 886-7600

Page 7 of 7

H&A FILE NO. 06318-520

LABORATORY

Deconstruct

DELIVERY DATE

3/2/12

PROJECT NAME: Final Energy Int. Study

ADDRESS

495 TAIL CTN

TURNAROUND TIME

H&A CONTACT

CONTACT

PROJECT MANAGER

16094

[illegible][illegible]

If Presumptive Certainty Data Package is needed, initial all sections:

The required minimum field QC samples, as designated in BWSG CAN-711 have been or will be collected, as appropriate, to meet the requirements of Presumptive Certainty Matrix Spike (MS) samples for MCP Metals and/or Cyanide are included and identified herein.

~~X~~ This Chain of Custody Record (specify) _____ includes _____
~~X~~ does not include samples defined as Drinking Water Samples _____

If this Chain of Custody record identifies samples defined as Drinking Water Samples, Trip Blanks and Field Duplicates are included and identified and analysis of TTCs are required as appropriate. Laboratory should (specify if applicable) _____ analyze

Required Reporting Limits and Data Quality Objectives

Evidence samples were tampered with? YES NO
If YES, please explain in section below.

<input type="checkbox"/> RC-S1	<input checked="" type="checkbox"/> S1	<input type="checkbox"/> GW1
<input type="checkbox"/> RC-S2	<input type="checkbox"/> S2	<input type="checkbox"/> GW2
<input type="checkbox"/> RC-GW1	<input type="checkbox"/> S3	<input type="checkbox"/> GW3
<input type="checkbox"/> RC-GW2		



ANALYTICAL REPORT

Lab Number:	L1203638
Client:	Haley & Aldrich, Inc. 465 Medford Street, Suite 2200 Charlestown, MA 02129-1400
ATTN:	Cole Worthy
Phone:	(617) 886-7341
Project Name:	FMR. ENERGY INT PARCEL
Project Number:	06318-520
Report Date:	03/08/12

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), USDA (Permit #P-330-11-00240), NC (666), TX (T104704476), DOD (L2217), US Army Corps of Engineers.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: FMR. ENERGY INT PARCEL
Project Number: 06318-520

Lab Number: L1203638
Report Date: 03/08/12

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1203638-01	HA-208 S1	495 TECH CTR	03/02/12 12:40
L1203638-02	HA-208 S2	495 TECH CTR	03/02/12 12:45
L1203638-03	HA-208 S3	495 TECH CTR	03/02/12 12:55
L1203638-04	HA-208 S4	495 TECH CTR	03/02/12 13:05
L1203638-05	HA-208 S5	495 TECH CTR	03/02/12 13:15

Project Name: FMR. ENERGY INT PARCEL

Lab Number: L1203638

Project Number: 06318-520

Report Date: 03/08/12

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES
A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	NO
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	NO
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	YES
For any questions answered "No", please refer to the case narrative section on the following page(s).		

Please note that sample matrix information is located in the Sample Results section of this report.



Project Name: FMR. ENERGY INT PARCEL
Project Number: 06318-520

Lab Number: L1203638
Report Date: 03/08/12

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

Please contact Client Services at 800-624-9220 with any questions.

MCP Related Narratives

PCBs

L1203638-01 has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

In reference to question G:

L1203638-01: One or more of the target analytes did not achieve the requested CAM reporting limits.

In reference to question H:

The surrogate recoveries for L1203638-01 are below the acceptance criteria for 2,4,5,6-Tetrachloro-m-xylene and Decachlorobiphenyl (all at 0%) due to the dilution required to quantitate the sample. Re-extraction was not

Project Name: FMR. ENERGY INT PARCEL
Project Number: 06318-520

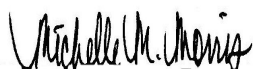
Lab Number: L1203638
Report Date: 03/08/12

Case Narrative (continued)

required; therefore, the results of the original analysis are reported.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:



Michelle M. Morris

Title: Technical Director/Representative

Date: 03/08/12

ORGANICS

PCBS

Project Name: FMR. ENERGY INT PARCEL**Lab Number:** L1203638**Project Number:** 06318-520**Report Date:** 03/08/12**SAMPLE RESULTS**

Lab ID: L1203638-01 **D**
Client ID: HA-208 S1
Sample Location: 495 TECH CTR
Matrix: Soil
Analytical Method: 97,8082
Analytical Date: 03/07/12 20:45
Analyst: KB
Percent Solids: 87%

Date Collected: 03/02/12 12:40
Date Received: 03/02/12
Field Prep: Not Specified
Extraction Method: EPA 3540C
Extraction Date: 03/03/12 01:35
Cleanup Method1: EPA 3665A
Cleanup Date1: 03/05/12
Cleanup Method2: EPA 3660B
Cleanup Date2: 03/05/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	1830	--	50
Aroclor 1221	ND		ug/kg	1830	--	50
Aroclor 1232	ND		ug/kg	1830	--	50
Aroclor 1242	ND		ug/kg	1830	--	50
Aroclor 1254	18900		ug/kg	1830	--	50
Aroclor 1262	ND		ug/kg	1830	--	50
Aroclor 1268	ND		ug/kg	1830	--	50

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150
Decachlorobiphenyl	0	Q	30-150
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150
Decachlorobiphenyl	0	Q	30-150

Project Name: FMR. ENERGY INT PARCEL**Lab Number:** L1203638**Project Number:** 06318-520**Report Date:** 03/08/12**SAMPLE RESULTS**

Lab ID: L1203638-01 **D**
Client ID: HA-208 S1
Sample Location: 495 TECH CTR
Matrix: Soil
Analytical Method: 97,8082
Analytical Date: 03/07/12 20:45
Analyst: KB
Percent Solids: 87%

Date Collected: 03/02/12 12:40
Date Received: 03/02/12
Field Prep: Not Specified
Extraction Method: EPA 3540C
Extraction Date: 03/03/12 01:35
Cleanup Method1: EPA 3665A
Cleanup Date1: 03/05/12
Cleanup Method2: EPA 3660B
Cleanup Date2: 03/05/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1248	14000		ug/kg	1830	--	50
Aroclor 1260	5600		ug/kg	1830	--	50

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150
Decachlorobiphenyl	0	Q	30-150
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150
Decachlorobiphenyl	0	Q	30-150

Project Name: FMR. ENERGY INT PARCEL**Lab Number:** L1203638**Project Number:** 06318-520**Report Date:** 03/08/12**SAMPLE RESULTS**

Lab ID: L1203638-02
Client ID: HA-208 S2
Sample Location: 495 TECH CTR
Matrix: Soil
Analytical Method: 97,8082
Analytical Date: 03/05/12 17:26
Analyst: KB
Percent Solids: 83%

Date Collected: 03/02/12 12:45
Date Received: 03/02/12
Field Prep: Not Specified
Extraction Method: EPA 3540C
Extraction Date: 03/03/12 01:35
Cleanup Method1: EPA 3665A
Cleanup Date1: 03/05/12
Cleanup Method2: EPA 3660B
Cleanup Date2: 03/05/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	39.8	--	1
Aroclor 1221	ND		ug/kg	39.8	--	1
Aroclor 1232	ND		ug/kg	39.8	--	1
Aroclor 1242	ND		ug/kg	39.8	--	1
Aroclor 1248	ND		ug/kg	39.8	--	1
Aroclor 1254	ND		ug/kg	39.8	--	1
Aroclor 1260	ND		ug/kg	39.8	--	1
Aroclor 1262	ND		ug/kg	39.8	--	1
Aroclor 1268	ND		ug/kg	39.8	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	60		30-150
Decachlorobiphenyl	64		30-150
2,4,5,6-Tetrachloro-m-xylene	60		30-150
Decachlorobiphenyl	80		30-150

Project Name: FMR. ENERGY INT PARCEL**Lab Number:** L1203638**Project Number:** 06318-520**Report Date:** 03/08/12**SAMPLE RESULTS**

Lab ID: L1203638-03
Client ID: HA-208 S3
Sample Location: 495 TECH CTR
Matrix: Soil
Analytical Method: 97,8082
Analytical Date: 03/05/12 14:50
Analyst: KB
Percent Solids: 60%

Date Collected: 03/02/12 12:55
Date Received: 03/02/12
Field Prep: Not Specified
Extraction Method: EPA 3540C
Extraction Date: 03/03/12 00:20
Cleanup Method1: EPA 3665A
Cleanup Date1: 03/05/12
Cleanup Method2: EPA 3660B
Cleanup Date2: 03/05/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	53.9	--	1
Aroclor 1221	ND		ug/kg	53.9	--	1
Aroclor 1232	ND		ug/kg	53.9	--	1
Aroclor 1242	ND		ug/kg	53.9	--	1
Aroclor 1248	ND		ug/kg	53.9	--	1
Aroclor 1254	ND		ug/kg	53.9	--	1
Aroclor 1260	ND		ug/kg	53.9	--	1
Aroclor 1262	ND		ug/kg	53.9	--	1
Aroclor 1268	ND		ug/kg	53.9	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	63		30-150
Decachlorobiphenyl	59		30-150
2,4,5,6-Tetrachloro-m-xylene	69		30-150
Decachlorobiphenyl	67		30-150

Project Name: FMR. ENERGY INT PARCEL**Lab Number:** L1203638**Project Number:** 06318-520**Report Date:** 03/08/12

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8082
 Analytical Date: 03/05/12 16:06
 Analyst: KB

Extraction Method: EPA 3540C
 Extraction Date: 03/03/12 00:20
 Cleanup Method1: EPA 3665A
 Cleanup Date1: 03/05/12
 Cleanup Method2: EPA 3660B
 Cleanup Date2: 03/05/12

Parameter	Result	Qualifier	Units	RL	MDL
MCP Polychlorinated Biphenyls - Westborough Lab for sample(s): 03 Batch: WG521225-1					
Aroclor 1016	ND		ug/kg	33.3	--
Aroclor 1221	ND		ug/kg	33.3	--
Aroclor 1232	ND		ug/kg	33.3	--
Aroclor 1242	ND		ug/kg	33.3	--
Aroclor 1248	ND		ug/kg	33.3	--
Aroclor 1254	ND		ug/kg	33.3	--
Aroclor 1260	ND		ug/kg	33.3	--
Aroclor 1262	ND		ug/kg	33.3	--
Aroclor 1268	ND		ug/kg	33.3	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	89		30-150
Decachlorobiphenyl	67		30-150
2,4,5,6-Tetrachloro-m-xylene	90		30-150
Decachlorobiphenyl	74		30-150

Project Name: FMR. ENERGY INT PARCEL**Lab Number:** L1203638**Project Number:** 06318-520**Report Date:** 03/08/12

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8082
 Analytical Date: 03/05/12 16:12
 Analyst: KB

Extraction Method: EPA 3540C
 Extraction Date: 03/03/12 01:35
 Cleanup Method1: EPA 3665A
 Cleanup Date1: 03/05/12
 Cleanup Method2: EPA 3660B
 Cleanup Date2: 03/05/12

Parameter	Result	Qualifier	Units	RL	MDL
MCP Polychlorinated Biphenyls - Westborough Lab for sample(s): 01-02 Batch: WG521226-1					
Aroclor 1016	ND		ug/kg	31.5	--
Aroclor 1221	ND		ug/kg	31.5	--
Aroclor 1232	ND		ug/kg	31.5	--
Aroclor 1242	ND		ug/kg	31.5	--
Aroclor 1248	ND		ug/kg	31.5	--
Aroclor 1254	ND		ug/kg	31.5	--
Aroclor 1260	ND		ug/kg	31.5	--
Aroclor 1262	ND		ug/kg	31.5	--
Aroclor 1268	ND		ug/kg	31.5	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	66		30-150
Decachlorobiphenyl	74		30-150
2,4,5,6-Tetrachloro-m-xylene	68		30-150
Decachlorobiphenyl	82		30-150

Lab Control Sample Analysis

Batch Quality Control

Project Name: FMR. ENERGY INT PARCEL

Lab Number: L1203638

Project Number: 06318-520

Report Date: 03/08/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Polychlorinated Biphenyls - Westborough Lab Associated sample(s): 03 Batch: WG521225-2 WG521225-3								
Aroclor 1016	75		77		40-140	3		30
Aroclor 1260	71		72		40-140	1		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	85		91		30-150
Decachlorobiphenyl	71		79		30-150
2,4,5,6-Tetrachloro-m-xylene	79		85		30-150
Decachlorobiphenyl	73		81		30-150

MCP Polychlorinated Biphenyls - Westborough Lab Associated sample(s): 01-02 Batch: WG521226-2 WG521226-3								
Aroclor 1016	49		57		40-140	15		30
Aroclor 1260	50		55		40-140	10		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	69		77		30-150
Decachlorobiphenyl	70		71		30-150
2,4,5,6-Tetrachloro-m-xylene	70		73		30-150
Decachlorobiphenyl	79		78		30-150

INORGANICS & MISCELLANEOUS

Project Name: FMR. ENERGY INT PARCEL**Project Number:** 06318-520**Lab Number:** L1203638**Report Date:** 03/08/12**SAMPLE RESULTS****Lab ID:** L1203638-01**Client ID:** HA-208 S1**Sample Location:** 495 TECH CTR**Matrix:** Soil**Date Collected:** 03/02/12 12:40**Date Received:** 03/02/12**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	87		%	0.10	NA	1	-	03/05/12 16:18	30,2540G	SD



Project Name: FMR. ENERGY INT PARCEL**Project Number:** 06318-520**Lab Number:** L1203638**Report Date:** 03/08/12**SAMPLE RESULTS****Lab ID:** L1203638-02**Client ID:** HA-208 S2**Sample Location:** 495 TECH CTR**Matrix:** Soil**Date Collected:** 03/02/12 12:45**Date Received:** 03/02/12**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	83		%	0.10	NA	1	-	03/05/12 16:18	30,2540G	SD



Project Name: FMR. ENERGY INT PARCEL**Lab Number:** L1203638**Project Number:** 06318-520**Report Date:** 03/08/12**SAMPLE RESULTS****Lab ID:** L1203638-03**Date Collected:** 03/02/12 12:55**Client ID:** HA-208 S3**Date Received:** 03/02/12**Sample Location:** 495 TECH CTR**Field Prep:** Not Specified**Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	60		%	0.10	NA	1	-	03/05/12 16:18	30,2540G	SD



Lab Duplicate Analysis
Batch Quality Control**Project Name:** FMR. ENERGY INT PARCEL**Project Number:** 06318-520**Lab Number:** L1203638**Report Date:** 03/08/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG521484-1 QC Sample: L1203555-02 Client ID: DUP Sample						
Solids, Total	85	83	%	2		20

Project Name: FMR. ENERGY INT PARCEL**Project Number:** 06318-520**Lab Number:** L1203638**Report Date:** 03/08/12**Sample Receipt and Container Information**

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA**Cooler Information Custody Seal****Cooler**

A Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1203638-01A	Amber 120ml unpreserved	A	N/A	2.8	Y	Absent	TS(7),MCP-8082-10-3540C(365)
L1203638-02A	Amber 120ml unpreserved	A	N/A	2.8	Y	Absent	TS(7),MCP-8082-10-3540C(365)
L1203638-03A	Amber 120ml unpreserved	A	N/A	2.8	Y	Absent	TS(7),MCP-8082-10-3540C(365)
L1203638-04A	Amber 120ml unpreserved	A	N/A	2.8	Y	Absent	HOLD(14)
L1203638-05A	Amber 120ml unpreserved	A	N/A	2.8	Y	Absent	HOLD(14)

Container Comments

L1203638-04A

L1203638-05A

*Values in parentheses indicate holding time in days

Project Name: FMR. ENERGY INT PARCEL
Project Number: 06318-520

Lab Number: L1203638
Report Date: 03/08/12

GLOSSARY

Acronyms

EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NI	- Not Ignitable.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit.
C	- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
D	- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
E	- Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
G	- The concentration may be biased high due to matrix interferences (i.e., co-elution) with non-target compound(s). The result should be considered estimated.
H	- The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
I	- The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported due to obvious interference.
M	- Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
NJ	- Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

Report Format: Data Usability Report



Project Name: FMR. ENERGY INT PARCEL**Lab Number:** L1203638**Project Number:** 06318-520**Report Date:** 03/08/12**Data Qualifiers**

- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

Project Name: FMR. ENERGY INT PARCEL
Project Number: 06318-520

Lab Number: L1203638
Report Date: 03/08/12

REFERENCES

- 30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.
- 97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certificate/Approval Program Summary

Last revised January 30, 2012 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0574. **NELAP Accredited Solid Waste/Soil.**

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP), Ethylene Dibromide (EDB), 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223 P/A), E. Coli. – Colilert (SM9223 P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D))

Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E).)

Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Volatile Organics, Acid Extractables (Phenols), 3,3'-Dichlorobenzidine, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Maine Department of Human Services Certificate/Lab ID: 2009024.

Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 353.2, SM2130B, 2320B, 2540C, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, SM2320B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NH3-H, 4500NO3-F, 4500P-B, 4500P-E, 5210B, 5220D, 5310C, 9010B, 9040B, 9030B, 7470A, 7196A, 2340B, EPA 200.7, 6010, 200.8, 6020, 245.1, 1311, 1312, 3005A, Enterolert, 9223D, 9222D. Organic Parameters: 608, 8081, 8082, 8330, 8151A, 624, 8260, 3510C, 3630C, 5030B, ME-DRO, ME-GRO, MA-EPH, MA-VPH.)

Solid Waste/Soil (Inorganic Parameters: 9010B, 9012A, 9014A, 9040B, 9045C, 6010B, 7471A, 7196A, 9050A, 1010, 1030, 9065, 1311, 1312, 3005A, 3050B. Organic Parameters: ME-DRO, ME-GRO, MA-EPH, MA-VPH, 8260B, 8270C, 8330, 8151A, 8081A, 8082, 3540C, 3546, 3580A, 3630C, 5030B, 5035.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.

Drinking Water (Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl) (EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate); (EPA 353.2 for: Nitrate-N, Nitrite-N); (SM4500NO3-F for: Nitrate-N and Nitrite-N); 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B. Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics); (504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), EPA 332. Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; ColilertQT SM9223B; MF-SM9222D.)

SM2510B, 2540C, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.

Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics),(608 for: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs-Water), (EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables), 600/4-81-045-PCB-Oil. Microbiology Parameters: (ColilertQT SM9223B;Enterolert-QT: SM9222D-MF.)

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. *NELAP Accredited.*

Drinking Water (Inorganic Parameters: SM 9222B, 9223B, 9215B, EPA 200.7, 200.8, 245.2, 300.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 332.0. Organic Parameters: 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 3005A, 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 350.2, 351.1, 353.2, 410.4, 420.1, 1664A, SW-846 9010, 9030, 9040B, SM426C, SM2120B, 2310B, 2320B, 2540B, 2540D, 4500H+B, 4500CL-E, 4500CN-E, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 5220D, 2510B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3510C, 3630C, 5030B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A, 8151A.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040B, 9045C, 9050C, 9065,1311, 1312, 3005A, 3050B. Organic Parameters: SW-846 3540C, 3546, 3550B, 3580A, 3630C, 5030B, 5035, 8260B, 8270C, 8330, 8151A, 8015B, 8082, 8081A.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. *NELAP Accredited.*

Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500CN-CE, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 200.8, 245.2, 2540C, SM2120B, 2320B, 2510B, 5310C, SM4500H-B. Organic Parameters: EPA 332, 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500CI-E, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM510ABC, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, 9222D, 9221B, 9221C, 9221E, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, 350.2, SW-846 1312, 6020, 6020A, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, 4500CN-CE, EPA 245.1, 245.2, SW-846 9040B, 3005A, 3015, EPA 6010B, 6010C, 7196A, 3060A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3510C, EPA 608, 624, 625, SW-846 3630C, 5030B, 8081A, 8081B, 8082, 8082A, 8151A, 8330, NJ OQA-QAM-025 Rev.7, NJ EPH.)

Solid & Chemical Materials (Inorganic Parameters: SW-846, 6010B, 6010C, 7196A, 3060A, 9010B, 9030B, 1010, 1030, 1311, 1312, 3005A, 3050B, 7471A, 7471B, 9014, 9012A, 9040B, 9045C, 9050A, 9065. Organic Parameters: SW-846 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3540C, 3545, 3546, 3550B, 3580A, 3630C, 5030B, 5035L, 5035H, NJ OQA-QAM-025 Rev.7, NJ EPH.)

New York Department of Health Certificate/Lab ID: 11148. *NELAP Accredited.*

Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500H-B, 4500NO3-F, 2540C, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, 5310C, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, SM4500CL-E, 4500F-C, SM15 426C, EPA 350.1, SM4500NH3-BH, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-04-1-C, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, LACHAT 10-204-00-1-A, EPA 9040B, SM4500-HB, EPA 1664A, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 9010B, 9030B.. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, EPA 3510C, 5030B.)

Solid & Hazardous Waste (Inorganic Parameters: 1010, 1030, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8015B, 8081A, 8151A, 8330, 8082, 3540C, 3545, 3546, 3580, 5030B, 5035.)

North Carolina Department of the Environment and Natural Resources Certificate/Lab ID : 666. Organic Parameters: MA-EPH, MA-VPH.

Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-03671. **NELAP Accredited.**
Drinking Water (Organic Parameters: EPA 524.2, 504.1)

Non-Potable Water (Inorganic Parameters: EPA 1312, 200.7, 410.4, 1664A, SM2540D, 5210B, 5220D, 4500-P, BE. Organic Parameters: EPA 3510C, 3005A, 3630C, 5030B, 625, 624, 608, 8081A, 8081B, 8082, 802A, 8151A, 8260B, 8270C, 8270D, 8330)

Solid & Hazardous Waste (Inorganic Parameters: EPA 350.1, 1010, 1030, 1311, 1312, 3050B, 3060A, 6010B, 6010C, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065, SM 4500NH3-H. Organic Parameters: 3540C, 3546, 3580A, 3630C, 5035, 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8260B, 8270C, 8270D, 8330)

Rhode Island Department of Health Certificate/Lab ID: LAO00065. **NELAP Accredited via NY-DOH.**

Refer to MA-DEP Certificate for Potable and Non-Potable Water.

Refer to NJ-DEP Certificate for Potable and Non-Potable Water.

Texas Commission on Environmental Quality Certificate/Lab ID: T104704476-09-1. **NELAP Accredited.**

Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 S²⁻ D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Virginia Division of Consolidated Laboratory Services Certificate/Lab ID: 460195. **NELAP Accredited.**

Non-Potable Water (Inorganic Parameters: EPA 3005A, 3015, 1312, 6010B, 6010C, SM4500S-D, SM4500-CN-CE, Lachat 10-204-00-1-X. Organic Parameters: EPA 8260B)

Solid & Hazardous Waste (Inorganic Parameters: EPA 3050B, 1311, 1312, 6010B, 6010C, 9030B, 9010B, 9012A, 9014. Organic Parameters: EPA 5035, 5030B, 8260B.)

Department of Defense, L-A-B Certificate/Lab ID: L2217.

Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6020, 245.1, 245.2, 7470A, 9040B, 300.0, 332.0, 6860, 353.2, 410.4, 9060, 1664A, SM 4500CN-E, 4500H-B, 4500NO3-F, 5220D, 5310C, 2320B, 2540C, 3005A, 3015, 9010B, 9056. Organic Parameters: EPA 8260B, 8270C, 8330A, 625, 8082, 8081A, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 7471A, 9010, 9012A, 6860, 1311, 1312, 3050B, 7196A, 9010B, 3500-CR-D, 4500CN-CE, 2540G, Organic Parameters: EPA 8260B, 8270C, 8330A/B-prep, 8082, 8081A, 3540C, 3546, 3580A, 5035A, MassDEP EPH, MassDEP VPH.)

The following analytes are not included in our current NELAP/TNI Scope of Accreditation:

EPA 8260B: Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A**: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C**: Methyl naphthalene, Dimethyl naphthalene, Total Methyl naphthalenes, Total Dimethyl naphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625**: 4-Chloroaniline, 4-Methylphenol. Total Phosphorus in a soil matrix, Chloride in a soil matrix, TKN in a soil matrix, NO₂ in a soil matrix, NO₃ in a soil matrix, SO₄ in a soil matrix.

CHAIN OF CUSTODY RECORD

ALPHA Job # C1003638

Phone (617) 886-7400
Fax (617) 886-7600

H&A FILE NO. 06318-520

PROJECT NAME Enviro Int Paul

H&A CONTACT C. Wootley

LABORATORY Acute

ADDRESS 495 Tech Ctr

CONTACT

DELIVERY DATE 3/2/12

TURNAROUND TIME STD

PROJECT MANAGER Col Wootley

Page 1 of 1

Sample No.	Date	Time	Depth	Type	Analysis Requested										Number of Containers	Comments (special instructions, precautions, additional method numbers, etc.)	
					VOA	ABNs PAH only	MCP Metals	Pesticides PCBs	VPH Full Suite C-ranges only	EPH Full Suite C-ranges only	TPH (specify)	TCLP (specify)	Reactivity Ignitability Corrosivity				
HA-20851	3/2/12	12:40	0-0.5	Soil													<p>② Will pending analysis of other samples - Contact Cole Wootley for info</p> <p>① PCB's by Soxhlet-Extract 3540C</p> <p>Laboratory to use applicable DEP CAM methods, unless otherwise directed.</p>
HA-20852		12:45	1-2	Soil													
HA-20853		12:55	2-3	Soil													
HA-20854		1:05	3-5	Soil													
HA-20855	3/2/12	1:15	5-7	Soil													
(5)																	
LIQUID																	
Sign <u>Michael A. Conolly</u>	Received by <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Sign <u>Michael A. Conolly</u>	Received by <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Sign <u>Michael A. Conolly</u>	Received by <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Sign <u>Michael A. Conolly</u>	Received by <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Sign <u>Michael A. Conolly</u>	Received by <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Sign <u>Michael A. Conolly</u>	Received by <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>
Print <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	
Date <u>3/2/12</u>	Date <u>3/2/12</u>	Date <u>3/2/12</u>	Date <u>3/2/12</u>	Date <u>3/2/12</u>	Date <u>3/2/12</u>	Date <u>3/2/12</u>	Date <u>3/2/12</u>	Date <u>3/2/12</u>	Date <u>3/2/12</u>	Date <u>3/2/12</u>	Date <u>3/2/12</u>	Date <u>3/2/12</u>	Date <u>3/2/12</u>	Date <u>3/2/12</u>	Date <u>3/2/12</u>	Date <u>3/2/12</u>	
Time <u>15:15</u>	Time <u>15:15</u>	Time <u>15:15</u>	Time <u>15:15</u>	Time <u>15:15</u>	Time <u>15:15</u>	Time <u>15:15</u>	Time <u>15:15</u>	Time <u>15:15</u>	Time <u>15:15</u>	Time <u>15:15</u>	Time <u>15:15</u>	Time <u>15:15</u>	Time <u>15:15</u>	Time <u>15:15</u>	Time <u>15:15</u>	Time <u>15:15</u>	
SOLID																	
Sign <u>Michael A. Conolly</u>	Received by <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Sign <u>Michael A. Conolly</u>	Received by <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Sign <u>Michael A. Conolly</u>	Received by <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Sign <u>Michael A. Conolly</u>	Received by <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Sign <u>Michael A. Conolly</u>	Received by <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Sign <u>Michael A. Conolly</u>	Received by <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>
Print <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	
Date <u>3/2/12</u>	Date <u>3/2/12</u>	Date <u>3/2/12</u>	Date <u>3/2/12</u>	Date <u>3/2/12</u>	Date <u>3/2/12</u>	Date <u>3/2/12</u>	Date <u>3/2/12</u>	Date <u>3/2/12</u>	Date <u>3/2/12</u>	Date <u>3/2/12</u>	Date <u>3/2/12</u>	Date <u>3/2/12</u>	Date <u>3/2/12</u>	Date <u>3/2/12</u>	Date <u>3/2/12</u>	Date <u>3/2/12</u>	
Time <u>15:30</u>	Time <u>15:30</u>	Time <u>15:30</u>	Time <u>15:30</u>	Time <u>15:30</u>	Time <u>15:30</u>	Time <u>15:30</u>	Time <u>15:30</u>	Time <u>15:30</u>	Time <u>15:30</u>	Time <u>15:30</u>	Time <u>15:30</u>	Time <u>15:30</u>	Time <u>15:30</u>	Time <u>15:30</u>	Time <u>15:30</u>	Time <u>15:30</u>	
PRESERVATION KEY																	
A Sample chilled	C NaOH	E H ₂ SO ₄	G Methanol	H Water/NaHSO ₄ (circle)													
B Sample filtered	D HNO ₃	F HCL															
EVIDENCE																	
Sign <u>Michael A. Conolly</u>	Received by <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Sign <u>Michael A. Conolly</u>	Received by <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Sign <u>Michael A. Conolly</u>	Received by <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Sign <u>Michael A. Conolly</u>	Received by <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Sign <u>Michael A. Conolly</u>	Received by <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Sign <u>Michael A. Conolly</u>	Received by <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>
Print <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	Print <u>Michael A. Conolly</u>	
Date <u>3/2/12</u>	Date <u>3/2/12</u>	Date <u>3/2/12</u>	Date <u>3/2/12</u>	Date <u>3/2/12</u>	Date <u>3/2/12</u>	Date <u>3/2/12</u>	Date <u>3/2/12</u>	Date <u>3/2/12</u>	Date <u>3/2/12</u>	Date <u>3/2/12</u>	Date <u>3/2/12</u>	Date <u>3/2/12</u>	Date <u>3/2/12</u>	Date <u>3/2/12</u>	Date <u>3/2/12</u>	Date <u>3/2/12</u>	
Time <u>18:05</u>	Time <u>18:05</u>	Time <u>18:05</u>	Time <u>18:05</u>	Time <u>18:05</u>	Time <u>18:05</u>	Time <u>18:05</u>	Time <u>18:05</u>	Time <u>18:05</u>	Time <u>18:05</u>	Time <u>18:05</u>	Time <u>18:05</u>	Time <u>18:05</u>	Time <u>18:05</u>	Time <u>18:05</u>	Time <u>18:05</u>	Time <u>18:05</u>	



ANALYTICAL REPORT

Lab Number:	L1203640
Client:	Haley & Aldrich, Inc. 465 Medford Street, Suite 2200 Charlestown, MA 02129-1400
ATTN:	Cole Worthy
Phone:	(617) 886-7341
Project Name:	FMR. ENERGY INT. PARCEL
Project Number:	06318-520
Report Date:	03/08/12

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), USDA (Permit #P-330-11-00240), NC (666), TX (T104704476), DOD (L2217), US Army Corps of Engineers.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: FMR. ENERGY INT. PARCEL
Project Number: 06318-520

Lab Number: L1203640
Report Date: 03/08/12

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1203640-01	HA-201 S1	495 TECH CTR.	03/02/12 08:10
L1203640-02	HA-201 S2	495 TECH CTR.	03/02/12 08:20
L1203640-03	HA-201 S3	495 TECH CTR.	03/02/12 08:25
L1203640-04	HA-201 S4	495 TECH CTR.	03/02/12 08:30
L1203640-05	HA-201 S5	495 TECH CTR.	03/02/12 08:35
L1203640-06	HA-201 S1B	495 TECH CTR.	03/02/12 08:15

Project Name: FMR. ENERGY INT. PARCEL

Lab Number: L1203640

Project Number: 06318-520

Report Date: 03/08/12

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES
A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	YES
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	YES
For any questions answered "No", please refer to the case narrative section on the following page(s).		

Please note that sample matrix information is located in the Sample Results section of this report.



Project Name: FMR. ENERGY INT. PARCEL
Project Number: 06318-520

Lab Number: L1203640
Report Date: 03/08/12

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

Please contact Client Services at 800-624-9220 with any questions.

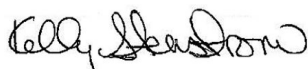
MCP Related Narratives

Report Submission

All MCP required questions were answered with affirmative responses; therefore, there are no relevant protocol-specific QC and/or performance standard non-conformances to report.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Kelly Stenstrom

Title: Technical Director/Representative

Date: 03/08/12

ORGANICS

PCBS

Project Name: FMR. ENERGY INT. PARCEL**Lab Number:** L1203640**Project Number:** 06318-520**Report Date:** 03/08/12**SAMPLE RESULTS**

Lab ID: L1203640-01
Client ID: HA-201 S1
Sample Location: 495 TECH CTR.
Matrix: Soil
Analytical Method: 97,8082
Analytical Date: 03/05/12 15:05
Analyst: KB
Percent Solids: 84%

Date Collected: 03/02/12 08:10
Date Received: 03/02/12
Field Prep: Not Specified
Extraction Method: EPA 3540C
Extraction Date: 03/03/12 00:20
Cleanup Method1: EPA 3665A
Cleanup Date1: 03/05/12
Cleanup Method2: EPA 3660B
Cleanup Date2: 03/05/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	38.0	--	1
Aroclor 1221	ND		ug/kg	38.0	--	1
Aroclor 1232	ND		ug/kg	38.0	--	1
Aroclor 1242	ND		ug/kg	38.0	--	1
Aroclor 1248	ND		ug/kg	38.0	--	1
Aroclor 1260	104		ug/kg	38.0	--	1
Aroclor 1262	ND		ug/kg	38.0	--	1
Aroclor 1268	ND		ug/kg	38.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	79		30-150
Decachlorobiphenyl	72		30-150
2,4,5,6-Tetrachloro-m-xylene	78		30-150
Decachlorobiphenyl	75		30-150

Project Name: FMR. ENERGY INT. PARCEL**Lab Number:** L1203640**Project Number:** 06318-520**Report Date:** 03/08/12**SAMPLE RESULTS**

Lab ID: L1203640-01
Client ID: HA-201 S1
Sample Location: 495 TECH CTR.
Matrix: Soil
Analytical Method: 97,8082
Analytical Date: 03/05/12 15:05
Analyst: KB
Percent Solids: 84%

Date Collected: 03/02/12 08:10
Date Received: 03/02/12
Field Prep: Not Specified
Extraction Method: EPA 3540C
Extraction Date: 03/03/12 00:20
Cleanup Method1: EPA 3665A
Cleanup Date1: 03/05/12
Cleanup Method2: EPA 3660B
Cleanup Date2: 03/05/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1254	121		ug/kg	38.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	79		30-150
Decachlorobiphenyl	72		30-150
2,4,5,6-Tetrachloro-m-xylene	78		30-150
Decachlorobiphenyl	75		30-150

Project Name: FMR. ENERGY INT. PARCEL**Lab Number:** L1203640**Project Number:** 06318-520**Report Date:** 03/08/12**SAMPLE RESULTS**

Lab ID: L1203640-02
Client ID: HA-201 S2
Sample Location: 495 TECH CTR.
Matrix: Soil
Analytical Method: 97,8082
Analytical Date: 03/05/12 15:20
Analyst: KB
Percent Solids: 84%

Date Collected: 03/02/12 08:20
Date Received: 03/02/12
Field Prep: Not Specified
Extraction Method: EPA 3540C
Extraction Date: 03/03/12 00:20
Cleanup Method1: EPA 3665A
Cleanup Date1: 03/05/12
Cleanup Method2: EPA 3660B
Cleanup Date2: 03/05/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	39.4	--	1
Aroclor 1221	ND		ug/kg	39.4	--	1
Aroclor 1232	ND		ug/kg	39.4	--	1
Aroclor 1242	ND		ug/kg	39.4	--	1
Aroclor 1248	ND		ug/kg	39.4	--	1
Aroclor 1260	103		ug/kg	39.4	--	1
Aroclor 1262	ND		ug/kg	39.4	--	1
Aroclor 1268	ND		ug/kg	39.4	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	83		30-150
Decachlorobiphenyl	78		30-150
2,4,5,6-Tetrachloro-m-xylene	83		30-150
Decachlorobiphenyl	84		30-150

Project Name: FMR. ENERGY INT. PARCEL**Lab Number:** L1203640**Project Number:** 06318-520**Report Date:** 03/08/12**SAMPLE RESULTS**

Lab ID: L1203640-02
Client ID: HA-201 S2
Sample Location: 495 TECH CTR.
Matrix: Soil
Analytical Method: 97,8082
Analytical Date: 03/05/12 15:20
Analyst: KB
Percent Solids: 84%

Date Collected: 03/02/12 08:20
Date Received: 03/02/12
Field Prep: Not Specified
Extraction Method: EPA 3540C
Extraction Date: 03/03/12 00:20
Cleanup Method1: EPA 3665A
Cleanup Date1: 03/05/12
Cleanup Method2: EPA 3660B
Cleanup Date2: 03/05/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1254	118		ug/kg	39.4	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	83		30-150
Decachlorobiphenyl	78		30-150
2,4,5,6-Tetrachloro-m-xylene	83		30-150
Decachlorobiphenyl	84		30-150

Project Name: FMR. ENERGY INT. PARCEL**Lab Number:** L1203640**Project Number:** 06318-520**Report Date:** 03/08/12**SAMPLE RESULTS**

Lab ID: L1203640-03
Client ID: HA-201 S3
Sample Location: 495 TECH CTR.
Matrix: Soil
Analytical Method: 97,8082
Analytical Date: 03/05/12 15:36
Analyst: KB
Percent Solids: 78%

Date Collected: 03/02/12 08:25
Date Received: 03/02/12
Field Prep: Not Specified
Extraction Method: EPA 3540C
Extraction Date: 03/03/12 00:20
Cleanup Method1: EPA 3665A
Cleanup Date1: 03/05/12
Cleanup Method2: EPA 3660B
Cleanup Date2: 03/05/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	42.4	--	1
Aroclor 1221	ND		ug/kg	42.4	--	1
Aroclor 1232	ND		ug/kg	42.4	--	1
Aroclor 1242	ND		ug/kg	42.4	--	1
Aroclor 1248	ND		ug/kg	42.4	--	1
Aroclor 1254	ND		ug/kg	42.4	--	1
Aroclor 1260	ND		ug/kg	42.4	--	1
Aroclor 1262	ND		ug/kg	42.4	--	1
Aroclor 1268	ND		ug/kg	42.4	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	69		30-150
Decachlorobiphenyl	60		30-150
2,4,5,6-Tetrachloro-m-xylene	65		30-150
Decachlorobiphenyl	59		30-150

Project Name: FMR. ENERGY INT. PARCEL**Lab Number:** L1203640**Project Number:** 06318-520**Report Date:** 03/08/12**SAMPLE RESULTS**

Lab ID: L1203640-06
Client ID: HA-201 S1B
Sample Location: 495 TECH CTR.
Matrix: Soil
Analytical Method: 97,8082
Analytical Date: 03/05/12 15:51
Analyst: KB
Percent Solids: 86%

Date Collected: 03/02/12 08:15
Date Received: 03/02/12
Field Prep: Not Specified
Extraction Method: EPA 3540C
Extraction Date: 03/03/12 00:20
Cleanup Method1: EPA 3665A
Cleanup Date1: 03/05/12
Cleanup Method2: EPA 3660B
Cleanup Date2: 03/05/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	37.6	--	1
Aroclor 1221	ND		ug/kg	37.6	--	1
Aroclor 1232	ND		ug/kg	37.6	--	1
Aroclor 1242	ND		ug/kg	37.6	--	1
Aroclor 1248	ND		ug/kg	37.6	--	1
Aroclor 1254	238		ug/kg	37.6	--	1
Aroclor 1260	161		ug/kg	37.6	--	1
Aroclor 1262	ND		ug/kg	37.6	--	1
Aroclor 1268	ND		ug/kg	37.6	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	78		30-150
Decachlorobiphenyl	72		30-150
2,4,5,6-Tetrachloro-m-xylene	76		30-150
Decachlorobiphenyl	76		30-150

Project Name: FMR. ENERGY INT. PARCEL**Lab Number:** L1203640**Project Number:** 06318-520**Report Date:** 03/08/12

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8082
 Analytical Date: 03/05/12 16:06
 Analyst: KB

Extraction Method: EPA 3540C
 Extraction Date: 03/03/12 00:20
 Cleanup Method1: EPA 3665A
 Cleanup Date1: 03/05/12
 Cleanup Method2: EPA 3660B
 Cleanup Date2: 03/05/12

Parameter	Result	Qualifier	Units	RL	MDL
MCP Polychlorinated Biphenyls - Westborough Lab for sample(s): 01-03,06 Batch: WG521225-1					
Aroclor 1016	ND		ug/kg	33.3	--
Aroclor 1221	ND		ug/kg	33.3	--
Aroclor 1232	ND		ug/kg	33.3	--
Aroclor 1242	ND		ug/kg	33.3	--
Aroclor 1248	ND		ug/kg	33.3	--
Aroclor 1254	ND		ug/kg	33.3	--
Aroclor 1260	ND		ug/kg	33.3	--
Aroclor 1262	ND		ug/kg	33.3	--
Aroclor 1268	ND		ug/kg	33.3	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	89		30-150
Decachlorobiphenyl	67		30-150
2,4,5,6-Tetrachloro-m-xylene	90		30-150
Decachlorobiphenyl	74		30-150

Lab Control Sample Analysis**Batch Quality Control****Project Name:** FMR. ENERGY INT. PARCEL**Lab Number:** L1203640**Project Number:** 06318-520**Report Date:** 03/08/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Polychlorinated Biphenyls - Westborough Lab Associated sample(s): 01-03,06 Batch: WG521225-2 WG521225-3								
Aroclor 1016	75		77		40-140	3		30
Aroclor 1260	71		72		40-140	1		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	85		91		30-150
Decachlorobiphenyl	71		79		30-150
2,4,5,6-Tetrachloro-m-xylene	79		85		30-150
Decachlorobiphenyl	73		81		30-150

INORGANICS & MISCELLANEOUS

Project Name: FMR. ENERGY INT. PARCEL**Project Number:** 06318-520**Lab Number:** L1203640**Report Date:** 03/08/12**SAMPLE RESULTS****Lab ID:** L1203640-01**Client ID:** HA-201 S1**Sample Location:** 495 TECH CTR.**Matrix:** Soil**Date Collected:** 03/02/12 08:10**Date Received:** 03/02/12**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	84		%	0.10	NA	1	-	03/06/12 14:33	30,2540G	SM



Project Name: FMR. ENERGY INT. PARCEL**Project Number:** 06318-520**Lab Number:** L1203640**Report Date:** 03/08/12**SAMPLE RESULTS****Lab ID:** L1203640-02**Client ID:** HA-201 S2**Sample Location:** 495 TECH CTR.**Matrix:** Soil**Date Collected:** 03/02/12 08:20**Date Received:** 03/02/12**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	84		%	0.10	NA	1	-	03/06/12 14:33	30,2540G	SM



Project Name: FMR. ENERGY INT. PARCEL**Project Number:** 06318-520**Lab Number:** L1203640**Report Date:** 03/08/12**SAMPLE RESULTS****Lab ID:** L1203640-03**Client ID:** HA-201 S3**Sample Location:** 495 TECH CTR.**Matrix:** Soil**Date Collected:** 03/02/12 08:25**Date Received:** 03/02/12**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	78		%	0.10	NA	1	-	03/06/12 14:33	30,2540G	SM



Project Name: FMR. ENERGY INT. PARCEL**Project Number:** 06318-520**Lab Number:** L1203640**Report Date:** 03/08/12**SAMPLE RESULTS****Lab ID:** L1203640-06**Client ID:** HA-201 S1B**Sample Location:** 495 TECH CTR.**Matrix:** Soil**Date Collected:** 03/02/12 08:15**Date Received:** 03/02/12**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	86		%	0.10	NA	1	-	03/06/12 14:33	30,2540G	SM



Lab Duplicate Analysis
Batch Quality Control**Project Name:** FMR. ENERGY INT. PARCEL**Project Number:** 06318-520**Lab Number:** L1203640**Report Date:** 03/08/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-03,06 QC Batch ID: WG521658-1 QC Sample: L1203640-02 Client ID: HA-201 S2						
Solids, Total	84	85	%	1		20

Project Name: FMR. ENERGY INT. PARCEL**Project Number:** 06318-520**Lab Number:** L1203640**Report Date:** 03/08/12**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Reagent H2O Preserved Vials Frozen on: NA**Cooler Information Custody Seal****Cooler**

A Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1203640-01A	Amber 120ml unpreserved	A	N/A	2.8	Y	Absent	TS(7),MCP-8082-10-3540C(365)
L1203640-02A	Amber 120ml unpreserved	A	N/A	2.8	Y	Absent	TS(7),MCP-8082-10-3540C(365)
L1203640-03A	Amber 120ml unpreserved	A	N/A	2.8	Y	Absent	TS(7),MCP-8082-10-3540C(365)
L1203640-04A	Amber 120ml unpreserved	A	N/A	2.8	Y	Absent	HOLD(14)
L1203640-05A	Amber 120ml unpreserved	A	N/A	2.8	Y	Absent	HOLD(14)
L1203640-06A	Amber 120ml unpreserved	A	N/A	2.8	Y	Absent	TS(7),MCP-8082-10-3540C(365)

*Values in parentheses indicate holding time in days

Project Name: FMR. ENERGY INT. PARCEL
Project Number: 06318-520

Lab Number: L1203640
Report Date: 03/08/12

GLOSSARY

Acronyms

EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NI	- Not Ignitable.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit.
C	- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
D	- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
E	- Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
G	- The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
H	- The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
I	- The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported due to obvious interference.
M	- Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
NJ	- Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

Report Format: Data Usability Report



Project Name: FMR. ENERGY INT. PARCEL
Project Number: 06318-520

Lab Number: L1203640
Report Date: 03/08/12

Data Qualifiers

- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the reporting limit (RL) for the sample.

Project Name: FMR. ENERGY INT. PARCEL
Project Number: 06318-520

Lab Number: L1203640
Report Date: 03/08/12

REFERENCES

- 30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.
- 97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certificate/Approval Program Summary

Last revised January 30, 2012 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0574. **NELAP Accredited Solid Waste/Soil.**

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP), Ethylene Dibromide (EDB), 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223 P/A), E. Coli. – Colilert (SM9223 P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D))

Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E).)

Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Volatile Organics, Acid Extractables (Phenols), 3,3'-Dichlorobenzidine, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Maine Department of Human Services Certificate/Lab ID: 2009024.

Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 353.2, SM2130B, 2320B, 2540C, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, SM2320B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NH3-H, 4500NO3-F, 4500P-B, 4500P-E, 5210B, 5220D, 5310C, 9010B, 9040B, 9030B, 7470A, 7196A, 2340B, EPA 200.7, 6010, 200.8, 6020, 245.1, 1311, 1312, 3005A, Enterolert, 9223D, 9222D. Organic Parameters: 608, 8081, 8082, 8330, 8151A, 624, 8260, 3510C, 3630C, 5030B, ME-DRO, ME-GRO, MA-EPH, MA-VPH.)

Solid Waste/Soil (Inorganic Parameters: 9010B, 9012A, 9014A, 9040B, 9045C, 6010B, 7471A, 7196A, 9050A, 1010, 1030, 9065, 1311, 1312, 3005A, 3050B. Organic Parameters: ME-DRO, ME-GRO, MA-EPH, MA-VPH, 8260B, 8270C, 8330, 8151A, 8081A, 8082, 3540C, 3546, 3580A, 3630C, 5030B, 5035.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.

Drinking Water (Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl) (EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate); (EPA 353.2 for: Nitrate-N, Nitrite-N); (SM4500NO3-F for: Nitrate-N and Nitrite-N); 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B. Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics); (504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), EPA 332. Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; ColilertQT SM9223B; MF-SM9222D.)

Page 25 of 28
Non-Potable Water (Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn); (EPA 200.7 for: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn); 245.1, SM4500H,B, EPA 120.1,

SM2510B, 2540C, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.

Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics),(608 for: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs-Water), (EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables), 600/4-81-045-PCB-Oil. Microbiology Parameters: (ColilertQT SM9223B;Enterolert-QT: SM9222D-MF.)

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. *NELAP Accredited.*

Drinking Water (Inorganic Parameters: SM 9222B, 9223B, 9215B, EPA 200.7, 200.8, 245.2, 300.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 332.0. Organic Parameters: 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 3005A, 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 350.2, 351.1, 353.2, 410.4, 420.1, 1664A, SW-846 9010, 9030, 9040B, SM426C, SM2120B, 2310B, 2320B, 2540B, 2540D, 4500H+B, 4500CL-E, 4500CN-E, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 5220D, 2510B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3510C, 3630C, 5030B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A, 8151A.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040B, 9045C, 9050C, 9065,1311, 1312, 3005A, 3050B. Organic Parameters: SW-846 3540C, 3546, 3550B, 3580A, 3630C, 5030B, 5035, 8260B, 8270C, 8330, 8151A, 8015B, 8082, 8081A.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. *NELAP Accredited.*

Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500CN-CE, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 200.8, 245.2, 2540C, SM2120B, 2320B, 2510B, 5310C, SM4500H-B. Organic Parameters: EPA 332, 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500CI-E, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM510ABC, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, 9222D, 9221B, 9221C, 9221E, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, 350.2, SW-846 1312, 6020, 6020A, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, 4500CN-CE, EPA 245.1, 245.2, SW-846 9040B, 3005A, 3015, EPA 6010B, 6010C, 7196A, 3060A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3510C, EPA 608, 624, 625, SW-846 3630C, 5030B, 8081A, 8081B, 8082, 8082A, 8151A, 8330, NJ OQA-QAM-025 Rev.7, NJ EPH.)

Solid & Chemical Materials (Inorganic Parameters: SW-846, 6010B, 6010C, 7196A, 3060A, 9010B, 9030B, 1010, 1030, 1311, 1312, 3005A, 3050B, 7471A, 7471B, 9014, 9012A, 9040B, 9045C, 9050A, 9065. Organic Parameters: SW-846 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3540C, 3545, 3546, 3550B, 3580A, 3630C, 5030B, 5035L, 5035H, NJ OQA-QAM-025 Rev.7, NJ EPH.)

New York Department of Health Certificate/Lab ID: 11148. *NELAP Accredited.*

Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500H-B, 4500NO3-F, 2540C, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, 5310C, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, SM4500CL-E, 4500F-C, SM15 426C, EPA 350.1, SM4500NH3-BH, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-04-1-C, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, LACHAT 10-204-00-1-A, EPA 9040B, SM4500-HB, EPA 1664A, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 9010B, 9030B.. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, EPA 3510C, 5030B.)

Solid & Hazardous Waste (Inorganic Parameters: 1010, 1030, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8015B, 8081A, 8151A, 8330, 8082, 3540C, 3545, 3546, 3580, 5030B, 5035.)

North Carolina Department of the Environment and Natural Resources Certificate/Lab ID : 666. Organic Parameters: MA-EPH, MA-VPH.

Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-03671. **NELAP Accredited.**
Drinking Water (Organic Parameters: EPA 524.2, 504.1)

Non-Potable Water (Inorganic Parameters: EPA 1312, 200.7, 410.4, 1664A, SM2540D, 5210B, 5220D, 4500-P, BE. Organic Parameters: EPA 3510C, 3005A, 3630C, 5030B, 625, 624, 608, 8081A, 8081B, 8082, 802A, 8151A, 8260B, 8270C, 8270D, 8330)

Solid & Hazardous Waste (Inorganic Parameters: EPA 350.1, 1010, 1030, 1311, 1312, 3050B, 3060A, 6010B, 6010C, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065, SM 4500NH₃-H. Organic Parameters: 3540C, 3546, 3580A, 3630C, 5035, 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8260B, 8270C, 8270D, 8330)

Rhode Island Department of Health Certificate/Lab ID: LAO00065. **NELAP Accredited via NY-DOH.**

Refer to MA-DEP Certificate for Potable and Non-Potable Water.

Refer to NJ-DEP Certificate for Potable and Non-Potable Water.

Texas Commission on Environmental Quality Certificate/Lab ID: T104704476-09-1. **NELAP Accredited.**

Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH₃-H, 4500NO₂B, 4500P-E, 4500 S²⁻D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Virginia Division of Consolidated Laboratory Services Certificate/Lab ID: 460195. **NELAP Accredited.**

Non-Potable Water (Inorganic Parameters: EPA 3005A, 3015, 1312, 6010B, 6010C, SM4500S-D, SM4500-CN-CE, Lachat 10-204-00-1-X. Organic Parameters: EPA 8260B)

Solid & Hazardous Waste (Inorganic Parameters: EPA 3050B, 1311, 1312, 6010B, 6010C, 9030B, 9010B, 9012A, 9014. Organic Parameters: EPA 5035, 5030B, 8260B.)

Department of Defense, L-A-B Certificate/Lab ID: L2217.

Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6020, 245.1, 245.2, 7470A, 9040B, 300.0, 332.0, 6860, 353.2, 410.4, 9060, 1664A, SM 4500CN-E, 4500H-B, 4500NO₃-F, 5220D, 5310C, 2320B, 2540C, 3005A, 3015, 9010B, 9056. Organic Parameters: EPA 8260B, 8270C, 8330A, 625, 8082, 8081A, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 7471A, 9010, 9012A, 6860, 1311, 1312, 3050B, 7196A, 9010B, 3500-CR-D, 4500CN-CE, 2540G, Organic Parameters: EPA 8260B, 8270C, 8330A/B-prep, 8082, 8081A, 3540C, 3546, 3580A, 5035A, MassDEP EPH, MassDEP VPH.)

The following analytes are not included in our current NELAP/TNI Scope of Accreditation:

EPA 8260B: Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A**: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C**: Methyl naphthalene, Dimethyl naphthalene, Total Methyl naphthalenes, Total Dimethyl naphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625**: 4-Chloroaniline, 4-Methylphenol. Total Phosphorus in a soil matrix, Chloride in a soil matrix, TKN in a soil matrix, NO₂ in a soil matrix, NO₃ in a soil matrix, SO₄ in a soil matrix.

CHAIN OF CUSTODY RECORD

ALPHA Job # L12036410

Phone (617) 886-7400
Fax (617) 886-7600

H&A FILE NO. 00318-523

PROJECT NAME Emc Energy Int. Pass

H&A CONTACT Cole Worthy

LABORATORY ADDRESS 495 Tech Ctr
CONTACT

DELIVERY DATE 3/2/12

TURNAROUND TIME STD

PROJECT MANAGER C. Worthy

Page 1 of 1

Sample No.	Date	Time	Depth	Type	Analysis Requested										Number of Containers	Comments (special instructions, precautions, additional method numbers, etc.)	
					VOA	ABNs PAH only	MCP Metals	Pesticides PCBs	VPH Full Suite C-ranges only	EPH Full Suite C-ranges only	TPH (specify)	TCLP (specify)	Reactivity Ignitability Corrosivity				
HA-201 S1	3/2/12	0810	0-0.5	Soil													Laboratory to use applicable DEP CAM methods, unless otherwise directed. PCB's by Soxhlet extract 35vol ② H&A pending analysis of samples of - Contact Cole Worthy for info
HA-201 S2		0820	1-2														
HA-201 S3		0825	2-3														
HA-201 S4		0830	3-5														
HA-201 S5		0835	5-7														
HA-201 S1B		0815	0-0.5														

Sampled and Relinquished by				Received by				PRESERVATION KEY												Evidence samples were tampered with? YES NO	
Sign	Print	Date	Time	Sign	Print	Date	Time	A	B	C	D	E	F	G	H	Volume	Volume				
Sign <u>Charles R. K...</u>	Print <u>Charles R. K...</u>	Date <u>3/2/12</u>	Time <u>15:15</u>	Sign <u>Michael A. August</u>	Print <u>Michael A. August</u>	Date <u>3/2/12</u>	Time <u>15:15</u>														
Sign <u>Michael A. August</u>	Print <u>Michael A. August</u>	Date <u>3/2/12</u>	Time <u>15:15</u>	Sign <u>Michael A. August</u>	Print <u>Michael A. August</u>	Date <u>3/2/12</u>	Time <u>15:15</u>														
Sign <u>Michael A. August</u>	Print <u>Michael A. August</u>	Date <u>3/2/12</u>	Time <u>15:15</u>	Sign <u>Michael A. August</u>	Print <u>Michael A. August</u>	Date <u>3/2/12</u>	Time <u>15:15</u>														
Sign <u>Michael A. August</u>	Print <u>Michael A. August</u>	Date <u>3/2/12</u>	Time <u>15:15</u>	Sign <u>Michael A. August</u>	Print <u>Michael A. August</u>	Date <u>3/2/12</u>	Time <u>15:15</u>														